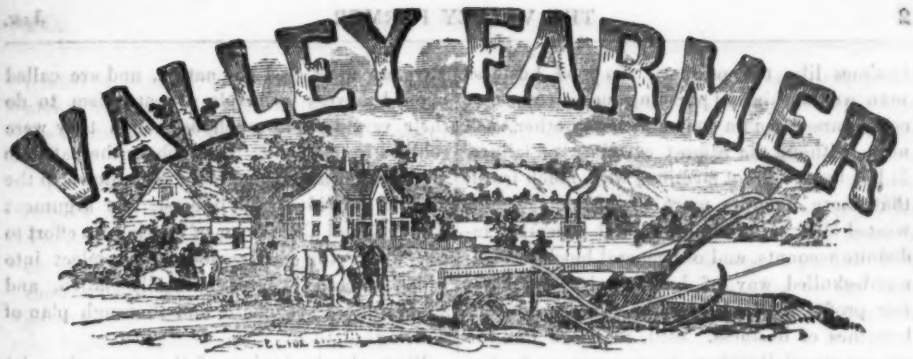

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Address, NORMAN J. COLMAN,
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HINTS FOR THE NEW YEAR.

The year through which we have just passed, has been one of remarkable and most deplorable events. Through the madness of the people, the country has been precipitated into that direst of calamities, civil war. Business of nearly all kinds throughout the whole country has been very much prostrated. The farming interest, generally speaking, has doubtless suffered less than any other principal branch of business. As farming affords to all the staff of life, as it feeds us and in a great measure clothes us, therefore, whatever may befall the country, the products of the farm will be in demand, and the business of the farmer continue good. Farming business will of course be much better at some times than at others; but when it is poor, we are safe in saying that nearly every other branch of business will be much poorer. When the farmer is obliged to sell his products at low prices, and has to pay high prices for such articles as he buys—which is to some extent the case at present—then, indeed, he may complain of unpropitious times for his business; yet he can, better than any other business man, accommodate himself to such circumstances. If retrenchment becomes necessary, he can almost entirely live without buying, because he is himself the great producer and manufacturer of the chief necessaries of life.

When the Mississippi river, the great outlet for the surplus produce of the West became closed by blockade, it was feared—at least such was the talk—that it would occasion great distress in the North-west—that farmers would scarcely be able to sell their produce at any price. Yet the blockade has existed for many months and prices have not yet been distressingly low, and the sure prospect is that they will range higher for at least the next six months. The grain crop of Europe has again been quite deficient. England must of necessity be supplied with breadstuffs from the United States, and this will keep prices up; at least till another crop is harvested in Europe. We refer to these things to show that there is not really so much cause for discouragement among farmers as many have supposed, or as exists among men of other occupations. Our main purpose, however, was to give some hints by way of improvement at the opening of the new year. And first, we would say, let there be an end to

CARELESS FARMING.

We know that the vast majority of farmers have been pursuing their business in such a manner that they have not known what profits they have made, or really whether they have made any at all or not. Such a course at all times is a grave error, and more particularly so

in times like the present. No good business man would think of pursuing such a course, or could pursue such a course with any other business, without the almost certainty of failure. It has been said of farming, with much truth, that there may be more of mismanagement, wasted labor, unprofitable capital, irregular, indefinite accounts, and of a general block-headed, numb-skulled way of doing business, and yet fair profits realized, than in any or all other branches of business. Still, in times like the present especially, there is every reason for farmers to pay more strict and careful attention to their business, and see that none of their capital or means is lying idle—that every dollar employed in their business shall be so invested as to bring a good return; in fact that their whole profits shall bear the best possible ratio to their investments or to the means employed. The very fact that farming may be made profitable in the very imperfect and indifferent manner in which it is too generally carried on, is strong proof that it may be made handsomely remunerative if conducted in the best manner and more in accordance with the principles on which other branches of business are conducted. This fact, which will be apparent on reflection, should stimulate every farmer, in times like the present when there is so much need of it, to do his best for his own and his country's good.

Since the commencement of the war, farmers have too generally been urged to plant as much land as possible—double the usual amount. This is often bad advice, and would be bad economy, because an acre which will produce thirty bushels of wheat will pay a threefold better profit than an acre which produces fifteen bushels. In many cases it would be far better economy to plant half the usual quantity of land, and thoroughly enrich and cultivate it; because it would produce more and at a better profit. Crops upon land that is in a state of thorough cultivation, are far less liable to injury from insects or unfavorable weather. The sure road to success in farming is high manuring and good culture. During the existence of the war, the farming force will be diminished in numbers. We should make up the deficiency by high culture, rather than by extensive planting, which has ever been the curse of our agriculture. It is an easy matter to run down hill in farming or any other business; but to get up higher requires an effort. That effort, farmers are now more than ever called upon to make. The nation is involved in an expensive war. Every ones' welfare is more or less involved. Farmers must feed the nation, and are called upon by every principle of patriotism to do their very best, as much as though they were soldiers in the army. So much for the patriotic view of the case; then, if we come down to the idea of individual self-interest, the argument will be found all in favor of making an effort to rise above the carelessness and neglect into which so many have naturally fallen, and adopt a more systematic and thorough plan of farming.

With the beginning of the year, then, let every farmer resolve on improvement. Let him study how he can best apply money, time, labor, thought, or means of any kind in his business. Let him resolve to know what relation his profits bear to his expenditures. If he has no faith in the business as a paying concern, let him resolve to try the experiment carefully for one year; and then let him report the result. It is facts—stubborn facts—that farmers want, and careless farming will never develop them. The details of carrying out such resolves as have been mentioned, will readily suggest themselves to the minds of most farmers. As one of the most important means, however, may be mentioned the plan of keeping

FARM ACCOUNTS.

Farming business is as much a matter of ledger account, with its debit and credit sides, as is any other business transaction. It is the only plan by which the farmer may always truly know the results of his business, and whether his investments have net him a suitable return. By such a plan he may soon know whether farming is to him a paying business or not. Farmers' sons may be required to keep such accounts with profit to themselves, aside from the desirableness of the general results. It will be a valuable business lesson to them. Commence the year then, if you have not already done so, with a careful estimate of the capital invested, of the means on hand; and then keep a strict daily account of expenses and income. It is a business like way of conducting business. It is what other business men do, and without which no business is likely to attain its best success. It is profitable, and a satisfaction to know the good or bad results of every dollar expended. Be careful that you do not sometimes withhold from spending through ill-conceived notions of economy. By attempting to save a dollar's expense, sometimes twenty may be lost. A daily record of each day's work on the farm is very useful. It is the want of ambition and pride in his calling on the part of the farmer that has

tended to degrade the business in the eyes of many; and prevented the farmer from realizing the profits and pleasures that were within his grasp.

In conclusion, we most ardently wish our readers all, a Happy New Year. That the *Valley Farmer* may be a welcome monthly visitor at the fireside, and be found profitable to each member of the family circle; and that peace and prosperity may be speedily restored to our beloved country, is our most ardent desire.

Management of Farm-yard Manure.

The supplies of farm-yard manure being on most farms inadequate to maintain the fertility of the soil, it is an important question with every farmer how the supply is to be increased. But it is even more important to preserve the fertilizing elements which the manure contains previous to its application to the land, than to augment the quantity. The majority of farmers, however, do not bestow sufficient care on the conservation of the fertilizing elements before the manure is spread on the fields to be fertilized. The preservation of these constituents is not simply a question of economical expenditure in the purchase of manures, but is one with which the profit or loss of the occupancy is intimately connected. Waste arises from several causes, the most common being a washing out of the soluble constituents from exposure, and the loss of the gaseous element from fermentation, induced by placing the manure in heaps previous to applying it to the land.

Farm-yard manure varies considerably in composition, the variations depending upon the animals kept, the manner they are housed, the amount and character of the food consumed by them, the kind or quantity of straw used as litter, the period of the year the manure is made, and whether it is made and kept under cover or exposed. The amount of water in half decomposed manure is seldom less than 80 per cent. Some chemists have estimated it as low as 75 per cent., but this is below the quantity of moisture present in ordinary farm-yard manure. The moisture is derived partly from the vegetable substances, a portion is derived from the urine of the stock, and under ordinary conditions a part is due to the rain-water absorbed.

On many farms the manure is not only exposed to the direct rain-fall, but the water which collects on the roofs of the buildings is allowed to saturate it. The consequence generally is that a considerable portion of the soluble elements is washed out of the manure, which liquid stream is usually allowed to escape to the nearest ditch, from a belief that it contains little fertilizing matter. The urine of animals generally contains nearly as much fertilizing matter as the excrement, and any liquid from the dung heap contains a portion of the urine. Apart from the urine present in the liquid, there are also present in a soluble state a portion of the fertilizing elements which were in the excrements, and a portion which were in the straw used as litter.

When it is considered that the liquid from byres, cattle courts, and manure heaps is generally nearly all lost, and that this liquid from the heap is not all rain water and melted snow, it should be evident that a considerable waste of the fertilizing elements in the farm-yard manure arises from the manner in which it is produced, collected, and kept previous to its being applied to the soil. Under ordinary circumstances, as to cultivation and climate, it is not requisite to form a tank to collect the liquid, but it is generally advisable to prevent the saturation of the manure in a court by placing roans along the eaves of the roofs. With such a provision to carry off the rain water, any direct fall of rain seldom washes out any of the fertilizing elements, the water being absorbed, and part of it afterward being removed by evaporation. During certain periods of the year the amount of moisture removed by evaporation is very considerable. It has been frequently observed where cattle were kept in open courts, with sheds attached, that in spring the quantity of straw required to keep them comfortable was less than that required for the same number of cattle fed in covered boxes.

During the process of fermentation, a considerable portion of the constituents of farm-yard manure are driven off. When the manure is compressed by the treading of stock, fermentation proceeds much more slowly than when the manure has been thrown loosely together. When the fermentation proceeds slowly, moisture is the principal constituent which escapes; but when fermentation is active, with considerable heat, a portion of the nitrogeneous element escapes generally in the form of ammonia. Beyond hastening the action of manure and destroying the vitality of the seeds of some weeds, there is nothing gained by fermenting manure in a heap. On the contrary, the organic fertilizing constituents are diminished in part, and the mechanical action of the manure necessarily impaired. It is advantageous to all soils, more particularly to argillaceous ones, to apply manures in a green state at certain seasons.

The cultivator of the potato finds it advantageous to manure the land in autumn with farmyard manure preparatory to the growing of the crop. So also the cultivator of the Swedish turnip and of the legumes. Experiments are much required to elucidate the action of fresh farmyard manure in and on the soil during the winter. Some suppose that the constituents of plant life in the soil are rendered more accessible to plants by being made soluble by the presence of this manure in or spread on the surface of the soil, while others believe that by the presence of the slowly-decomposing manure ammonia is attracted from the atmosphere and retained in the soil ready to be taken up by the crop. The researches of Professor Thomas Way showed that ordinary soils have the power of retaining the constituents of plant life, although these are in a soluble state, until the growing plants assimilate these constituents during their growth.

Those who are familiar with the beneficial effects which arise from the spreading of farmyard manure on the surface and allowing it to be exposed to the atmosphere for some months, know that the fertilizing action of the manure is more marked in the succeeding crop than if it had been applied during winter or spring after being fermented. The action may be partly mechanical, but it is now ascertained by the researches of chemists, that during the period of exposure the nitrogenous elements are increased in amount, being generally in the form of nitrates; the increase being regulated in part by the temperature of atmosphere, the constituents of the manure, and perhaps also by the constituents of the soil.

By spreading fresh manure on pastures and meadows, and after exposure for some months collecting by horse rakes the manure not decomposed, a striking difference in the character of the herbage is the result. Doubtless, this is mainly owing to the constituents of the manures which have been washed into the soil during the period the manure was exposed. Still, there is some mechanical action arising from a covering of manure; for upon inspection the soil is found to be more open, and the roots of the plants more vigorous. The same mechanical action can be observed in stubble lands, particularly where the soil is argillaceous. The soil is not only more friable, and therefore more porous, but the color is partly changed, showing that the action of the atmosphere has been increased by the manurial covering.

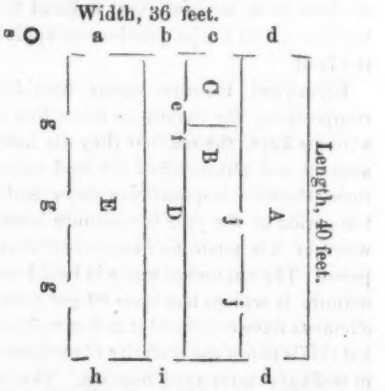
Those who entertain opinions strongly in favor of fermenting manure in dunghills, previous to its being applied to the land, should undertake experiments by manuring portions of fields intended for green crops during the next two months—the same quantities of manure applied to the portions of the fields being placed in heaps for spring application to the same extent of land manured in autumn. The results will probably surprise the cultivator who has hitherto only applied fermented manure to the soil.

During the spring months it is generally found to be advantageous to apply manure in a state of advanced decomposition, particularly where it is being applied to land intended to be immediately sown with the seed of the turnip; but during summer, autumn, and winter it will generally be found profitable to apply manure direct from the cattle courts and dunghill, without any previous turning to induce fermentation. [*North British Agriculturist.*

A PLAN FOR FARM BUILDINGS.

ED. VALLEY FARMER: If it is not intruding too much on your patience, permit me to offer the readers of the *Valley Farmer*, my plan for building a stable, corn-crib, feed-room, wagon-house, tool-shop, carpenter-shop, and hay-loft, large enough to hold sufficient hay to feed on one yard (without re-filling), if well mowed in; whole size of building 36x40, and can be built for from $380 to $500, according to taste.

PLAN:



Description—The lower story consists of: A, wagon-house, 12x40 feet; B, corn-crib, 8x28 feet; C, feed-room, 8x12 feet; D, passage, 4 feet wide by 40 long; E, stable, containing 8 stalls, each 5 feet wide by 12—2½ feet of which is occupied by manger and feed-box, each box being built to *right* of each stall—the whole next to passage; making it convenient to corn-crib and feed-room; the hay also being thrown down at far end of passage, the feeding all being done

from passage. I have a small passage leading from the large passage to back of horses in the first stall, which is very convenient.

The following is a description of doors and windows: a, entrance to stable; b, entrance to passage; c, feed-room window; d, d, entrance to wagon-house; e, entrance to feed-room from passage; f, entrance to corn-crib from passage; g, g, g, doors for throwing out manure; h, window at far end of stable for purpose of air and light; i, window at far end of passage for same; j, j, doors for throwing corn in crib.

The second story consists of hay mow, embracing $\frac{2}{3}$; tool shop half the remaining $\frac{1}{3}$, and a carpenter-shop the remaining half of $\frac{1}{3}$, with slight partition between them and the hay mow; the tool-shop and carpenter-shop being over wagon-house and approached by a flight of stairs leading from wagon-house, also by one from passage, the same as used in going to hay-loft; the door for putting hay in loft being immediately *over* passage entrance b; for admitting light in carpenter-shop, I have two windows.

If the above is not complete, build a cistern as shown in diagram at letter s.

Paint the name of each horse at entrance of stall, and you not only have a neat and convenient stable, &c., but will in a short time have *learned* horses, as they then can learn their stall by reading their names, which they soon do; it being also very convenient to servants, as they can tell which horse their master or mistress wants by merely giving the name—provided they can read. FRANK LEE.

Freedom's Home, Ky., Nov. 16, 1861.

THE GRAIN CROP OF 1861.

THE FOREIGN DEMAND.

The cereal crops in 1860 and '61 are unexampled in the history of this country. Notwithstanding this, the price of breadstuffs last year remained high throughout the season.—Yet, beyond the enormous export to Europe, there is a large surplus from the old crop, in many districts of country, amounting to nearly one-half of the crop, which still remains on hand in this country. The grain crop of England in 1861 was deplorably short. A greater failure has not been known to occur within the last 50 years. The usual importations of foreign grain into that country for actual home consumption, beyond what she can possibly raise, with all the modern improvements in agriculture, is about 40,000,000 bushels, but for the twelve months preceding September, 1861, they amounted to the enormous sum of 84,000,000 bushels, equal to three bushels to every inhabitant of Great Britain. During this period the importation of goods to the United States from that country has been proportionately less than ever before known, and out of the $60,000,000 or $80,000,000 paid by that country for foreign grain, $50,000,000 of the amount reached this country. Since the first of January, 1861, our exports of breadstuffs have been at the rate of $2,000,000 worth a week, and sometimes it reached $3,000,000, while our importations of foreign wares and merchandise are still diminishing.

In former years France has been able to furnish England with a considerable portion of the grain she required from abroad; but the present harvest in France falls immensely short of the demand for home consumption; and in order to meet the deficiency, the Emperor made early preparations for large importations from America, Russia, and even from England. In connection with the Emperor's encouraging the speedy importation of breadstuffs, he temporarily abolished all charges on transit through the rivers and canals of the empire, indicating the great deficiency remote from the sea coast. He also decreed that all grain-laden vessels should be exempt from harbor charges in the seaports of France till October, 1862.

Our wheat and corn crops for 1861 are large, considerably above an average. Our usual average corn crop may be estimated at about 900,000,000 bushels, while the crop of 1861 can hardly fall short of 1,000,000,000 bushels.

These facts present abundant encouragement to our Western farmers, and warrant an advancing price for our entire surplus. To this, however, there is one drawback, viz: The lack of adequate means of transportation to tide-water as well as upon the ocean. The canals and lakes are now closed, and the only means of transportation left is by railroad, and the entire capacity of all the roads leading from the interior to the seaboard is insufficient, if devoted exclusively to the transportation of grain, to carry forward the amount required.

France, which for several years past has been a considerable exporter of grain, will require, for the present year not less than 80,000,000 bushels for home consumption. This, with the prospective requirements of the English market, will amount to *nine thousand cargoes* of 16,000 bushels each. Such is the present demand of these two countries; while Spain, Belgium and Holland will all be under the necessity of going abroad for grain.

In consequence of the suspension of the navigation of the Lower Mississippi, the increased demands upon the railroads eastward have been immense, and consequently have led to a great advance in the rates of transportation, which will operate to the disadvantage of the Western farmer. The cost of transportation of Indian corn, for instance, from Illinois to New York, is equivalent to from six to eight tenths of its value at that market, leaving too small a proportion to the producer. These disadvantages, however, we hope are but temporary.—The demands of trade will, in some form or other find means to remedy this evil to some extent at a period not remote.

Besides the disastrous failure of the grain crops of England, the falling off in the crop of wheat in Ireland upon 60,000 acres, is estimated at 1,440,000 bushels, being less than half an average of an ordinary crop; add to this the almost total failure of the potato crop of that country by rot, and there is a deplorable prospect for the people of that country.

STOP UP THE CREVICES.

Edgar Sanders in the *Prairie Farmer* says:

How to stop up crevices in buildings of all kinds, to keep out the rude winter winds, is, to such buildings as are not over-nicely jointed, of very great importance. Many a good animal suffers severely during winter by exposure to cold drafts; many human habitations even have to be "stopped up," and before winter fairly sets in, old rags, pieces of paper, cotton, and similar material may be seen sticking out, showing the necessity of the thing we are writing of. But for this purpose, especially in all buildings of unplaned boards, there is nothing like common mortar made from good lime, with at least 3 parts sharp sand. It should be made several days before using; in fact, we keep some on hand all the fall months, and fill up as opportunity offers. The tools required, are a small mason's trowel and a hand-mortar-board much similar to those used by plasterers. It is well known that however dry lumber may be when put up, it is bound to shrink, and very often will from being wet or unseasoned, enough to leave a space of ¼ to ½ an inch. This may be battened, but the cold wind is bound to come in; but just go to work and stop with mortar, and not a breath can find its way; even the roof boards can be readily done also. If the interstices are very wide, however, after filling, it should be pressed upwards with a thin piece of lath. Those who have not tried it, would scarcely believe how tight it will cling to the boards. Even in the doors that are constantly shaken, it will after filling, rarely fall out. To take away the unsightly appearance, just whitewash the building afterwards. This is a very simple matter, yet, we venture to say, few think of it and less practice it, but in our estimation it is not to be beat. Another thing, too, worth knowing is, that salt and wood ashes equal parts made into a mortar, is one of the very best articles for stopping leakages in air tight stoves. We have been trying a slight addition of common mortar, in fixing an ordinary wood burner to that of a coal burning stove, and it looks at present just the thing to fill up any vacancies. At any rate the former may be relied on for stopping cracks in stoves.

THE BEAN CROP.

ED. VALLEY FARMER: Raising white beans in Missouri, I think, is something new. That is, except in a few instances, farmers have not been in the habit of planting more than a garden patch of beans. Last spring, however, owing to the breaking out of war, and the demand for beans for army and navy use, many farmers were induced to plant a crop of several acres of beans. In nearly every instance within my knowledge, the crop was planted late, I think the latter part of June, and did not ripen perfectly before frost killed it, although frost held off late. The yield, so far as I know, did not exceed twenty bushels to the acre. They were in each instance, however, planted too wide apart. About double the number of plants might have been grown to the acre equally well. The crops were sold at $1.25 to 1.65 per bushel, according to quality. Although not more than half a crop, as I suppose, was realized, those farmers are well enough pleased with the crop to plant it again next year more largely. The variety planted here has generally been the small navy bean.

Now, if those who have been most successful with this crop in the West, will communicate their experience to the *Valley Farmer*, I think it would be of great benefit, because the crop is comparatively new among us, and very many will desire to plant more or less largely next spring. The common opinion here is that they were planted too late in the season last year, and too far apart.

It is said that the small variety of navy beans, as they are called, sells most readily, and for the best price in market. Why this should be

the case, if it really is so, I am at a loss to understand. Many of the larger varieties, as the Early China, Marrow, and others are considered by all good judges the richest and best beans. They mature earlier, yield better, and would be better in this climate I think for either early or late crop.

Whether war creates an extra demand or not, the bean crop has not met with the attention that it deserves. Thirty-five or forty bushels to the acre, I think, may be considered an average crop, and one dollar a bushel an average price. It will therefore pay better than wheat. It is a good crop for the land—a good fallow crop. Like other leguminous plants the roots penetrate deeply into the soil, thereby opening it—much of its food is drawn from the atmosphere, and the ground is left in excellent condition for fall wheat. If the beans are planted early, especially the early kinds, the crop may be harvested in good time for sowing wheat. The straw or haulm of the bean is excellent fodder for sheep; and I believe hogs and cattle relish it. If the price should happen to be low, or feed for stock scarce, beans are rich and profitable food for stock of any kind. Except for sheep, they should be ground or cooked, or both; and so also should corn. For human food they are very nutritious and wholesome.

With my present rather limited knowledge of the bean crop here, I should adopt something like the following plan in planting:

First—Select dry, quick soil, sandy loam preferred, not too rich, and put it in a good mellow condition by the plow and harrow.

Second—Mark it off in drills with a light shovel plow, two and a half feet apart; select the White Marrow or Early China for seed; drop them about four inches apart in the drills, about the first of May, or as soon as danger from frost is over, and cover about two inches deep. In light soils it would be well to cover with a shovel plow and then pass a roller over the whole, leveling the ground.

Third—I should clean off weeds twice with the shovel plow or narrow cultivator and hoe; and should gather with a common scythe before they were fully ripe, but turned yellow. I should expect to harvest about forty bushels to the acre.

Now, if brother farmers will correct my errors, if any, and give their facts in relation to the bean crop. I shall be much gratified, and doubtless many others will be equally so.

St. Louis Co., Dec. 15th, 1861. M.

BAD ECONOMY.

As we have been lately traveling through the country, we have seen a good deal of bad economy, and we will speak of some of it. Perhaps the most striking exhibition of it, is the absence of barns, stables and sheds upon farms. If people knew how much they lost annually for the want of shelter, we believe, among the very first things they attended to would be the erection of barns or stables of some description. The loss which is suffered annually by the decay and injury to all kinds of farming implements and machines, wagons, &c., is great—and the still greater loss in neglecting to afford shelter to stock would be astounding to those whose attention has never been called to the matter. How can young cattle thrive and grow without warm shelter, exposed to the cold blasts and pelting storms of winter. The fact is they do not grow, so cared for, during winter, but come out in poorer condition in spring (if they do not "give up the ghost" entirely) than they started at the beginning of winter. This is very bad economy. With warm shelter they would not have required so much food, and would have thrived and grown all the time, and been worth several dollars per head more in spring. They would sooner be ready for market, and command by their greater size a far better price. And these remarks apply not only to young cattle, but to all kinds of stock. How can cows give milk during winter with nothing but fence corners for shelter? It is an impossibility.

We lately staid over night with an excellent farmer in Illinois, who gives proper attention to his stock. In the morning a young daughter of about fourteen years of age showed us a patent bucket full of milk which she had just got from her cow. This she gave every night and morning. We found this cow with all the others in a warm stable, well provided for, in fine condition—and, of course, good cows thus taken care of will give an abundance of milk, and it is *good* economy thus to provide for them.

When will our people appreciate the importance of shelter. We have often spoken of this matter, and believe with beneficial results, but "line is needed upon line." See to it farmers that good shelter in abundance is provided for everything you have. Anything that is worth having, is worth proper care and attention.

The world renowned chemist Liebig says that a single pound of bone dust contains as much phosphoric acid as one hundred pounds of wheat. From this it can easily be seen that

there are bones wasted on every farm in this State sufficient to manure the whole wheat crop. This to many will doubtless appear strange, but it is nevertheless true.

MAY WHEAT.

We are informed that Col. C. C. Ziegler, of St. Genevieve Co., Mo., had a very fine crop of May wheat the past season. The yield of the entire amount sown was over 31 bushels per acre. The wheat was perfectly clean—no cheat or smut in it. The seed was procured from the South. We regret that we were not informed earlier of this fact, so that we could have informed our readers where to procure good seed. As St. Genevieve is considerably south of St. Louis it would be well for many of our readers to procure their seed wheat hereafter from Col. Ziegler, if they can. We have for several years past advised our readers to obtain their seed wheat as far South as possible. The crop will ripen earlier, be freer from disease, and the yield will be larger. Col. Ziegler is one of our most enterprizing farmers. We understand that he is planting several thousand peach and other fruit trees, and is adopting a thorough and scientific system of farming.

SOMETHING ABOUT BONE DUST.

In England, bones were first used as a manure in Yorkshire. They were found exceedingly beneficial on the poor, thin soil of the wolds, and Hull soon became the focus of an immense trade. Several large bone-mills were erected on the Humber, and the home supply being entirely inadequate to the demand, they were imported from Northern Europe in immense quantities. In 1815, 8,000 tons were imported into Hull, and in 1835, 25,700 tons.

In 1829, bones were first used upon the highlands of Cambridgeshire. That they were found useful, may be inferred from the fact that in that year Mr. Thornwall, who first introduced bone dust into the county, sold 2,800 bushels, and his trade steadily increased each year, till in 1841 he sold 76,800 bushels.

In 1821, the total value of the bones imported into Great Britain was $79,490; in 1837, $1,283,000. This gives some idea of the rapid extension of the trade in bone dust, and also of the benefit derived from its use.

When first introduced, the preparation of bones for some years consisted in breaking them, by hammers, into small pieces. This was generally performed by the farmer himself. In some instances, they were placed in the wheel-marks or ruts, and broken by driving over them with the broad-tired English carts and wagons. Sometimes they were burned, but this destroys half their value. Again, after being imperfectly broken, they were thrown into a dung heap, or mixed in a compost of earth, or with lime, until a partial disintegration of their substances took place. The introduction of machinery, in 1814 or 1815, was a great step in advance. The machine was very imperfect, as it left the bones as large as an egg. Subsequently great improvements have taken place, and the bones are reduced to pieces of three-fourths to half an inch down to the finest dust.

The quantity used per acre varies according to the size of the crushed bones. Of fine bone dust 16 bushels per acre is a good dressing.

Bone dust is of more benefit to the turnip than to any other crop. Cabbage, mangels, beets, and most garden vegetables, except potatoes, are also benefitted by it. Old grass lands have also been greatly improved by an application of bones—both in the quantity and quality of the herbage.

In some sections, on poor sandy land, bone dust is found to be a good manure for wheat, corn, and other cereals. On most wheat soils, bone dust is not a *profitable* manure for cereal crops—that is to say, we can get the ingredients required in a cheaper form.—[*Genesee Farmer.*

[Written for the Valley Farmer.]

PLASTER.

After all, practice is the only test with plaster: this is reliable. While the "doctors" are disagreeing, the farmers are reaping the benefit, and solving the problem of plaster; for plaster is still a mystery. Sir Humphrey Davy calls it a manure—sulphate of lime—simply this. Liebig gives it other properties. And so on. But the farmer is the wiser one: he is guided by experience, the only true and ultimate test. And it is this practice that leads the march of improvement. More money is sunk in experiment than is generally known. It is a dear lesson; but it generally pays in the end, for every failure has some good that is not lost. F. G.

WEEVIL-PROOF WHEAT.—Every now and then we hear of a "weevil-proof" wheat. It is a very taking title. Good for an advertisement heading; but there is no truth in the idea that *any* wheat is weevil-proof. If it escapes the midge, it is owing to its flowering before or after the appearance of the insect. The Mediterranean generally escapes because it is early, and Spring wheat sometimes because it is late. There is no coat of mail that is "proof" against the insect,

and the word "weevil-proof" should not be used, as it conveys an erroneous idea..—[*Geneseo Farmer.*

How to Tan Skins of Domestic Animals.

A correspondent of the *Field*, London, in answer to an inquiry, recommends the following method:

The recipe found to answer far the best—and it was my own idea entirely; suggested, perhaps, slightly by the white powder which came from deer skins I had regularly cured by a tanner—is this: to wash and clean thoroughly the skin, stretch it well on a board with plenty of large pins, scrape off with a knife all the flesh, fat and inner skin until the leather is laid bare, then rub in powdered quicklime; clean off the first layer, which will be damp and killed, and put on another to the depth of an eighth of an inch, or more; rake it over the next day, in case any should have got damp and killed from the skin, so that there shall be a coating of dry hot lime next to the skin, and put it by for—the longer the better—six months, if you like, in a dry room. I have several skins done in this way in my hall, dogs and cats of my own curing—one especially, a very large and handsome cat, possibly a wild one, I killed one day while shooting with a friend in North Wales, on one of his outlying beats; and these skins, if not as supple as if done by a regular tanner, are quite enough so for any purpose.

Another correspondent of the same journal gives these directions:

Take 2 lbs. of coarse salt and 1 lb. of alum, broken fine, and dissolve in water. Place the skins with the hair down in a tub; pour the water over, and place a board and weight on them, in order to keep them quite covered with the pickle. Let them lie in this for a week, then nail them on a board, skin side out, and when dry rub smooth with pumice-stone. These skins are quite soft and pliable, and keep well for years.

Uses of Rawhide.—Few persons know the value of rawhide. It seems almost strange to see them sell all of their "deacon" skins for the small sum of thirty or forty cents. Take a strip of well-tanned rawhide, an inch wide, and a horse can hardly break it by pulling back—two of them he cannot break any way. Cut into narrow strips, and shave the hair off with a sharp knife, to use for bag strings; the strings will out-last two sets of bags. Farmers know how perplexing it is to lend bags and have them returned minus strings. It will out-last hoop iron (common) in any shape, and is stronger. It is good to wrap around a broken thill better than iron. Two sets of rawhide halters will last a man's life time—(if he dont live too long.) In some places the Spaniards use rawhide log chains to work cattle with, cut into narrow strips and twisted together hawser fashion. It is good to tie in for a broken link in a trace chain. It can be tanned so that it will be soft and pliable like harness leather. Save a cow and "deacon's" pelt and try it.—[*Country Gentleman.*

CULTURE OF SORGHUM.

We are pleased to learn of the success which has attended the culture of Sorghum the past season. We have heard but little of the manufacture of sugar, but much of the manufacture of syrup. We have tasted several samples of Sorghum syrup that would compare favorably with the best article of golden syrup manufactured from the sugar cane. We believe that the culture of Sorghum for syrup or molasses will prove highly remunerative. While the war lasts it will become almost a necessity, and we shall give full directions about planting, cultivation, and manufacturing the syrup in future numbers of the *Valley Farmer*, so that our readers may have reliable instructions how to proceed through the whole process.

Mr. B. Smith, Cuba, Mo., visited us a few days since, and informed us that from one acre of Sorghum, he had manufactured four barrels, of 44 gallons each, of beautiful syrup, which commands a ready sale at about fifty cents a gallon. He gave us his plan of manufacture.

We have a favor to ask of those who have been raising it, and manufacturing syrup successfully: it is that they will write an article for the *Valley Farmer*, giving full details of the best method of cultivation, plan of manufacturing, and all other information that will be useful to those engaged in its culture.

CHEAP ICE-HOUSE.

The following plan of a cheap and convenient ice-house was furnished to the *Rural New Yorker*, by Mr. E. Marks, of Onondaga county. Make a box eight feet square, by nailing hemlock planks, which are two inches thick, on to hemlock scantling. Let one side of the box be seven feet high, and the side directly opposite ten feet high. This gives a roof eight feet long, with a slant of three feet. It is well to have the roof boards extend over the sides of the box. Double boarding with hemlock makes a sufficient roof. Set this box on the top of the ground, in a dry, shady place, where surface water will not accumulate. No planks are needed on the bottom of the box, but sawdust must be placed on the ground inside the box to the depth of one foot, and over this place loose boards for the ice to lie upon. Cut the cakes of ice two feet square, and build a tower of ice two feet square in the centre of your box (or ice house, we will now call it,) by laying the cakes compactly together, and filling all crevices with sawdust as you proceed. We have now six feet cubic of ice, with a space of one foot all around between the ice and planks. Fill this place with sawdust, and cover the top of the ice with the same eighteen inches deep, and you have ice enough secured to last a family through the season. The upper three feet of the side which is ten feet high, should not be boarded up, but left for ventilation, and a place of access to the ice, and this aperture may be enlarged as convenience may require while using the ice, and for more conveniently filling in. About 800 feet of lumber will be required, and the merest tyro in the use of tools can make it. Fresh sawdust is best, but it may be used a second winter. The dust can be easily washed from the ice at the time of using.

MAKE BULLS WORK.

ED. VALLEY FARMER: I send you an article from the *Boston Cultivator*, which you will do well to publish in the *Valley Farmer*, for the benefit of those who work oxen. I can endorse the truth of all he says on working bulls, having had twenty years' experience. There is much folly in keeping a bull idle on a farm. He can perform more labor than a steer, except in sultry weather. I have had a pair of bulls that would haul fifty bushels of corn out of the field, and three miles to market; or a cord of green wood. There is no better cure for a breachy and vicious bull than hard work in a cart; it also prevents him from goring oxen when yoked to a wagon or cart. Much may be said on the utility of working bulls; let farmers try the experiment once, and I will guarantee they will never keep an idle bull to break fences and roam over the neighborhood. S.

St. Louis Co., Mo.

Here is the article referred to:

WORK BULLS.—All bulls might be made to do work enough to pay the expense of keeping them, and they would, in every respect, be the better for it. If they have any disposition to be turbulent, nothing will more effectually "take the conceit" out of them, and render them safe and manageable, than constant labor. Mr. E. R. Andrews, of West Roxbury, owns the imported Ayrshire bull Albert, and for some time past has worked him almost daily. A yoke was made for him, and, by means of saddle and breeching, he is harnessed in the thills of a wagon or cart, and hauls any load of suitable weight for a horse. Indeed, the men who have him in charge state that he can pull more than any horse on the farm. They take him to the field, and carry from thence to the barn a ton or more of grain or hay at once. He is very tractable and easily managed, but is quick in his action, generally walking faster than a horse commonly does. He has been used considerably in hauling manure out of the barn-cellar, and there being considerable of a rise in the ground, he has been shod to assist him in getting a foothold, and to keep him from getting footsore. We are assured that he often takes a heavier load up this rise than two stout horses could. He is said to be "handy" anywhere. A man saddles him as he would a horse, gets on his back, and, by lines attached to the ring in his nose, guides him, and "takes the road" at a smart pace. In fact, he is made "generally useful" about the premises.

SELECTING GRAIN FOR SEED.—That ancient and intelligent farmer, Columella, gave the wheat-growers of his day the following piece of advice: "I have this further direction to give, that when the corns are cut down and brought into the threshing-floor, we should even then think of making provision of seed, for the future seed time; for this is what Celsus says: Where the corn and crop are but small, we must prick out all the best ears of corn, and, of them, lay up our seed separately by itself. On the other hand, when we shall have a more plentiful harvest than ordinary, and a larger grain, whatever part of it is threshed out must be cleansed with the sieve; and that part of it which, because of its weight and bulk, subsides and falls to the bottom of the sieve, must always be reserved for seed; for this is of very great advantage, because, unless such care be taken, corns degenerate, &c."

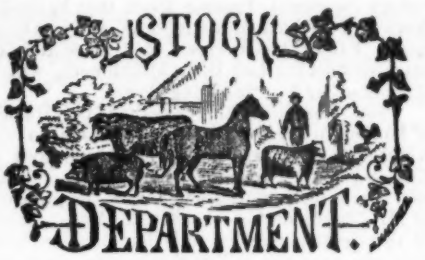
BONES—AN EASY WAY TO DISSOLVE.—James S. Grennell, Esq., of Greenfield, practises dissolving bones by a method which seems worthy of notice from its simplicity and convenience. Casks having each but one head are provided; a layer of bones six or seven inches thick placed on the bottom; then strong unleached, wood ashes are spread over the bones to the thickness of two inches or more. The casks are filled in this way, taking care to have a pretty good thickness of ashes at the top to prevent the exhalation of ammonia. The process of thus packing the bones goes on through the season, as ashes accumulate in the house, and they remain in the casks till spring, when the casks are emptied, and the bones are found to be generally well pulverized, or so soft that they can easily be broken as fine as desired. The mixed bones and ashes are excellent manure for most crops, and especially for fruit crops.

MAKING BRINE FOR BEEF.—A correspondent of the *Rural New-Yorker* says: Pack your beef close into the barrel, then take three ounces of saltpetre, ten pounds of salt, and twelve quarts of water, for every one hundred pounds of beef. Put these into your kettle and boil until well dissolved. Then pour boiling hot upon the beef, cover the barrel close to keep in the steam. If you want to dry any portion you can take it out of the brine in forty-eight hours and hang up. In the spring take out the beef and cleanse the brine, adding one-half the original quantity of salt and saltpetre, and as much water as will cover the beef when repacked, letting the brine stand until cold before pouring it on the beef.

MANURES IN ENGLAND—Prof. Anderson gives the following estimate of the amount expended annually by the farmers of Great Britain for artificial manures:

Guano, - - -	$12,500,000
Nitrate of Soda, - -	1,125,000
Bones, - - -	1,200,000
Superphosphates, - -	2,100,000
Coprolites, - -	1,875,000
Sulphate of Ammonia, -	750,000
Other articles, - -	500,000
Total, - -	$20,050,000

This expenditure, coupled with improved methods of tillage, account for the fact that the average product of wheat in England has been raised from eight or nine bushels to nearly thirty bushels per acre.



[Communicated for the Valley Farmer.]

BIG-HEAD AND BIG-JAW.

BY GEO. H. DADD, VETERINARY SURGEON.

Preliminary.—The terms big-head and big-jaw are used by husbandmen and others throughout the great West and South, to designate a disease of the bony structure of the horse, a disease about which very little, of a reliable character, has ever been said or written. Yet the subject is one of great importance to the people of this country, for the simple reason that the evil is one of alarming proportions, and should the disease multiply in a ratio equal to that of the few past years, it will be a terrible blow to the laudable and hitherto profitable enterprise of raising colts, in sections where this disease prevails.

I do not wish to create any unnecessary alarm, but I urge the husbandmen of the South and South-West to give this subject their earnest consideration; for the disease probably has an hereditary origin; "is inbred," and that, as the saying is "constitutes the root of the evil;" and the disease having been pronounced incurable, our only hopes of success in putting a stop to its propagation and development, is to adopt preventive measures by rejecting, as breeders, all animals—sire and dam—that show the least predisposition to or for this affection. Let the reader understand that the disease itself is *incurable*, in so far as the enlargement, dilitation, and softening of the jaw bones is concerned; yet like spavin, ring-bone, and various other diseases, it is accompanied, in certain stages, by lameness, and our services as physicians, are only secured in view of removing this lameness, so that the animal may be enabled to perform the ordinary equine duties; this is what some persons please to term a cure, whereas, it almost always happens that some alteration in the structure of the parts remain, which actually renders the horse unsound, because he has that about him, which may from over-work, or other exciting causes, impair his usefulness.

As regards the "alarming" feature of big-head or big-jaw, I would inform the reader, that almost every lame horse, examined by myself or my partner, Dr. Livezey, during the past six months, had either one or the other of the jaws enlarged; in some cases, one angle of the lower jaw was the seat of thickening and enlargement, but among the majority both angles were affected. These remarks do not apply to other obvious or accidental lamenesses which are also constantly occurring.

A short time ago, I visited, in company with a practicing veterinarian, whose attention had never been called to this affection, three horses, the subjects of lameness, which was said to be occasioned by eating Hungarian grass: to the astonishment of the parties concerned, I demonstrated that they were all the subjects of enlargements of the lower jaws, and from the history of the cases and the character of the *lameness*, it was very evident, that it was of an articular character, and this is a peculiar feature of this affection. Then again the reader must bear in mind, that the jaws of animals do not dilate nor enlarge suddenly, nor make appearance all at once, like a meteor in regions of space: the affection is insiduous, progresses in an almost imperceptible manner, and usually escapes the notice of those who daily have charge and handle the animal, as the following case, which is selected from among many others will serve to illustrate:

About eighteen months ago, Mr. Wayne, of this city, purchased what then appeared as a fine family horse—a sorrel gelding—aged, five years. About the beginning of last March, one year after the purchase, in attempting to walk the animal from one stable to another, but a short distance off, he became suddenly lame in one of the hind limbs—low down towards the foot—and it was found almost impossible to urge him forward; finaly assistance was procured and the animal had, literally, to be carried into a stable. My services having been secured, I visited the sufferer, and found him standing on three legs, the near hind one being placed resting on the toe; the parts around the coronet were hot and the patient was very unwilling to have the part handled; he seemed to suffer much pain, was breathing hurriedly, and the pulsations were quick and wiry; the near approach of any person seemed to terrify the animal, and he actually trembled from fear and pain when ordered to move. On making an examination of the jaws, I found that both angles of the lower jaw were enlarged to about two inches in thickness; this explained the nature of the sudden, and otherwise mysterious lameness; the articulating surfaces of various bones, and the bones themselves had become diseased, as is often the case in big-jaw. The owner assured me that the horse had never before been lame, and he was very much surprised to find the lower jaw enlarged. Here the reader will perceive that the animal had been in Mr. W.'s possession one year, had performed ordinary labor, yet was the subject of a gradual enlargement of the jaw and a constitutional disease, which probably existed, yet in a slight degree, at the time of purchase; hence I contend that the disease in its early stages is of a hidden or insiduous character, and requires some tact and knowledge of the subject in order to detect it.

Nature of the Disease.—Big-head and big-jaw, are but one form of disease, only located in different parts. When the upper one becomes the seat of affection, an enlargement of the facial bones will be observed, and the examiner's attention will be attracted by the unnatural appearance of the face; as the disease progresses,

the face looks more like that of an elephant than of a horse, and now the disease being incurable, the subject should be mercifully put out of his misery. The enlargement of the lower jaw is discovered by manipulation.

On removing the skin from the sides of the face of such a subject, and dissecting the muscles and periosteum (covering of bone), the bones appear to have undergone a softening process, and particles can be separated by means of the finger nails; at the same time if a transverse section of any of the shaft bones be made, they will be found to have undergone structural changes; for example, they will not only appear softened but honey-combed, and many of the laminæ and cartilaginous braces will have been decomposed or dissolved, so that the bone looks like fibrous network. In most cases, the vacuities and canals are filled with material resembling soft cheese, which is probably fatty matter; this occasionally degenerates into pus.

Dr. Gordon of this State, forwarded me some time ago, the head of a horse who had long been the subject of this malady. The transverse diameter of the bones of both upper and lower jaw, was very much enlarged; the periosteum was very highly organized with bloodness; the bones were softened and elastic, and could be easily cut with a knife. On submitting them to the acid test, earthy matter was found in excess, and by burning them, it was found that they contained very little animal matter, hence I was led to infer that the disease is one of mal-nutrition.

The articular surfaces of various bones, and sometimes all the bones of the body, are often ulcerated and studded with incrustations; this explains the why and wherefore of the sudden and tormenting pains which animals suffer, and goes to show how little benefit can be expected from the ordinary treatment, which is principally directed to the enlarged jaws.

On removing these diseased cartilages from the articulating surfaces of bones, the latter are found to be affected; in fact, ulcerated. In some cases the ligaments and tendons are separated by decomposition or necrosis of bone, and the animal "breaks down," as the saying is.

The subjects of this disease sometimes show lameness in the vertebral region, and in that of the head of the thigh bone; in such cases we may safely infer that the lameness is of an articular character, and the inter-articular cartilages, as well as the surfaces of the bones are incrustated and ulcerated; in this condition the animal is liable to become useless, or "break down" at any moment. The following brief case will illustrate what is meant by "breaking down:"

I was requested a short time ago by Prof. Muzzy of this city, to examine an aged gray gelding, the subject of lameness in the near hind foot; examination revealed considerable heat, tenderness and tumefaction around both the hind coronets, and both angles of the lower jaw much enlarged in their transverse diameters. I advised the owner to let the animal have a run at grass; accordingly he was sent into the country, about thirty miles (which was too long a journey for him); a few days afterwards Prof. Muzzy received a letter stating that the horse's strings (tendons), became loose, that he broke down and traveled on his fetlocks, and was then dead. I infer that necrosis took place and the extensor tendons lost their attachment, which accounted for his "breaking down."

Prof. Varnell lately consulted Dr. Harley of London in reference to this formidable malady which is said to have been almost unknown in England until November 1859, when several cases occurred among some horses, the property of Mr. Champion Calcot, near Reading. Three of this gentleman's animals had died, a fourth was not expected to live many days, and two others were laboring under the same disease in a less acute form. The most singular feature of the disease, as it appeared on the premises of Mr. Calcot were, that it did not appear to owe its origin to any perceiveable cause, and it was not known to be prevalent in any other part of England. Still, my opinion is that it does exist in that country, only not being suspected is not sought for. It prevails very extensively among horses brought to this city, and hundreds of horses are purchased for the American army in the course of a few months, having more or less enlargement of the lower jaw, yet I do not believe that either seller or purchaser suspects the same. This arises from a lack of knowledge on the subject, and the same remarks, so far as our ignorance of the subject is concerned, may apply to England.

In answer to questions put to Mr. Calcot on the subject of management, &c., he contends that the affected animals had plenty of exercise; there were no chemical factories or works in the vicinity; one horse affected was purchased at a distance, the rest had been bred on his farm; the sires and dams all appeared free from the disease, and they were not all got by the same sire; the food consisted of good grass, hay, pollard, oatmeal and roots: other horses were on the farm, fed in the same manner as the affected ones, yet they had no symptoms of the disease (perhaps they will show symptoms when the jaws shall be examined, they may have the disease, yet not be lame or apparently ailing). Mr. Calcot never saw a case of the kind before. From the above testimony, we may infer that the causes of this affection are not yet discovered in England, but my impression is that overfeeding has a good deal to do in the production of the malady.

It appears to me that this disease, as I have already written, is one of mal-nutrition or defective nourishment; hence, may be considered as a scorbutic affection, like that affecting the human subject, and which is known to be the result of faulty nutrition, and which often results in the division of bony parts, that should be immovable—the epiphyses of the pelvis for example; also separation of cartilages from the ribs, and the shaft bones softened and ruined by caries, ulceration or death of bones.

[To be concluded in Feb. No.]

WASHINGTON'S HORSE STABLES.—The President's stables in Philadelphia were under the direction of German John, and the grooming of the white chargers will rather surprise the

moderns. The night before the horses were expected to be ridden they were covered entirely over with a paste, of which whiting was the principal component part; then the animals were swathed in body-clothes, and left to sleep upon clean straw. In the morning the composition had become hard, was well rubbed in, and curried and brushed, which process gave to the coats a beautiful, glossy and satin like appearance. The hoofs were then blackened and polished, the mouth washed, teeth picked and cleaned, and the leopard-skin housing being properly adjusted, the white chargers were lead out for service. Such was the grooming of the ancient times.—[*Recollections of Washington.*

Cows—Mode of Feeding—Making Cheese.

The following is the report of one of the most successful Herkimer county dairymen before the Windfield Union Ag. Society. It is brief and to the point:

Breed of Cows.—Native, with perhaps a light mixture of Durham; 4 two year old heifers, 6 three years old, and a number of poor milkers, the balance a fair lot.

Mode of Feeding.—When a cow comes in she is removed to the milking barn, where she is fed all the hay she will eat, with three pints to two quarts of oat meal, wet with what whey the hogs do not take, with a handful of carrots to each cow, a bushel to twelve or fifteen, till we have fed 150 bushels. This mode we continued till we got plenty of grass, then we dropped off the meal and fed nothing but the whey throughout the summer.

About the first of Sept. we began to feed corn, planted for that purpose, which we fed two or three weeks; while feeding this, they did not vary much in their milk; no shrinking as they would if not fed. Then we tried them with rowen foddering at night when put up to milk, which we think was better than corn.

Saving Rennets.—We keep the calf three or four days, let it eat at night, and kill the next morning when the stomach is empty; take out the rennet, put it in a dish of salt, let it pickle well, then stretch it on a stick and let it dry, and it is fit for use.

Milking and Manufacturing Cheese.—Our milking, in summer, is pretty uniform—before sunset at night, and after sunrise in the morning. We strain in a vat with water running round it, stir the milk till it is cool and the froth well settled; in the morning we skim the vat and warm the milk to 88°, then add rennet sufficient to form a firm curd in about one hour, then cut carefully with a knife with four blades, made for the purpose; then let it stand for a while then cut again, and so continue till it becomes fine; if too cool, raise the heat soon after cutting the first time; when it has stood a sufficient time, and the curd has become hard enough, put on the steam and raise the heat to about 100°, then cover up and let stand till it becomes hardened sufficiently, which must be determined by the judgment, the time varying from ¾ to 2¾ hours, which depends on the condition of the milk, or in other words how far the acid has taken effect. When hardened sufficiently, draw off the whey, and drain dry, and add 2¾ lbs. of salt, stir well, and let stand a few minutes, and press till the whey is all out. The cream taken off, spoken of above, some people say is not worth much; we make it into butter, a sample of which may have been seen at the Union Fair at West Windfield, October 1, 1860. The quantity made from each cow per day, was less than other people tell of getting, less than three pounds; the most we made per day was 179 lbs. from 62 cows; milk out for family use.

Advantages of Ground Food for Stock.

Ed. Valley Farmer: In the October number of your paper, something is said of different varieties of corn, and particularly of the superior fattening qualities of the hard and flinty kinds, because they contain more oil and gluten. This fact, every observing farmer is no doubt aware of, but the millers complain that the flint varieties are hard to grind, and I think that if the animals which are fed on such corn could speak, they would make a much louder complaint than the miller does. It is the opinion of some, that feeding such corn to cattle and horses soon injures their teeth to a considerable extent. They cannot chew it so well, and much of it passes through them whole. Now, this is a serious objection to the hard though richer varieties of corn; and, unless they are so much more valuable as to pay for the cost of grinding, I think farmers will generally prefer raising softer corn. I think I have noticed in the discussions of the Meramec Horticultural Society that the same objection was raised there. Can you, or some of your correspondents, inform us whether we can afford to raise flint corn and have it ground for stock.

G. W. Fouratt.

We can tell our correspondent that it is good economy to grind grain of all kinds for stock. The harder or softer kind of corn, or oats, or any kind of grain fed whole to stock will not be perfectly masticated or digested. Much of it passes through them whole, as every one is aware. Grain, or any other substance which passes through the stomach and bowels undigested, is not only a waste but a positive injury, by overtaxing the digestive powers and by acting as an irritant to the bowels, impairing the health and vigor of animals. This will be readily admitted by any one in the least familiar with animal physiology. Having regard only to the comfort, vigor and health of animals, we should say that it is economy to grind corn or any other grain for feeding.

In regard to the difference in feeding value between varieties of corn richest in fat and flesh forming principles and those which contain these principles in a lesser degree, we think, judging from observation and analytical figures,

that it varies from five to twenty-five per cent. according to varieties. Oil alone varies from an entire absence to eleven per cent. Therefore, to answer the particular point questioned by our correspondent, we say that it will pay to raise the harder and more oily varieties of corn and grind them for feeding.

Thirdly, it is estimated by those who have made careful observations in the matter, that at least twenty-five per cent. of any grain fed whole, in a raw state, will be voided by the animal in a whole or undigested condition—an amount lost, therefore, sufficient to about doubly pay the cost of grinding.

Experiments of Samuel H. Clay, of Ky., recorded in the Dec. number of the *Valley Farmer* for 1856, in fattening hogs, proved that each pound of meat gained by feeding dry corn varied in cost in different cases from four cents and one mill to ten cents and one mill, valuing the corn at twenty-eight cents per bushel. By feeding on corn meal cooked the cost of each pound of meat gained was about one cent and a half. The gain of the hogs fed on the cooked meal was about three times as great as the gain of those fed on the dry corn.

Dry corn fed to horses or cattle, is of a heating or feverish nature and hard of digestion. The practice of grinding the corn, then wetting and mixing with cut hay or straw, is one which well repays the labor and expense. Mixing corn about half and half with oats, and then grinding for horse feed, is a common practice in some places. It makes superior feed for horses, but should not be fed dry, and is much better mixed with cut fodder. Feeding corn whole, unless it has been previously cooked, is in all cases where mills are plenty, very bad economy. There is no doubt that the teeth of horses and cattle are injured by it.

EPIDEMIC BRAIN FEVER AMONG HORSES.—A person writing to the Santa Cruz *Sentinel* from Sacramento, Monterey county, Texas, says:

"Now everything looks prosperous for farmers and stockholders, except the appearance in this vicinity of a disease in horses which has been raging in Salinas Valley for nearly two years. It has at last made its appearance here. Its ravages have been chiefly on one band of brood mares—about thirty in number, large and small—owned by Frank Sylvester. Out of the whole number (than which, no later than two months ago, there was not a better looking band of mares in San Antonio) there is not more than eight left, but what have not died or are now crazy. I suppose a reason is that it is a disease of the brain. It has more lately made its appearance in a horse of Jose Gomez, which will at last die in spite of bleeding, which is the only way of curing they have there. Sometimes the animals recover, but not to their former spirit."

DISEASES OF CATTLE.

THE BLAIN.—This is a frequent disease. The animal appears dull and low spirited. Its eyes red, with tears in them. The eyes swell a little. The principal symptom, however, is blisters under the tongue, or at the back part of the mouth; the pulse is quicker than usual, and the bowels are confined. The flanks heave a little, usually. If the beast has had the disease some time, the saliva flows freely, often mixed with bloody, offensive matter. The animal becomes much reduced in flesh and strength; and is in danger of dying from the enlargement on the tongue.

Cure—The first thing to be done, is to cut the bladders under and along the side of the tongue. This will relieve the beast materially.

If there is much fever, take four or five quarts of blood, and give the following purge:

Epsom salts, one pound.
Powdered caraway seeds, half an ounce:
Dissolved in a quart of warm gruel.

If the fever continues pretty severe, the above medicine may be given once or twice in twenty-four hours, till it subsides.

The mouth should be washed with equal parts of myrrh and water; or a decoction of green tea, so as to heal the ulcers. The gruel should be placed near to the animal, if the mouth is so sore that it cannot eat hay, and plenty of gruel administered by force.

Sometimes the animal will become very weak, and lose its appetite. If this be the case, when the fever is gone, give it the following:

Gentian root, two drachms;
Tartrate of iron, one drachm;
Powdered ginger, one drachm:
In a pint of gruel.

This should be given twice a day, until the appetite returns and the beast improves.

☞Be careful that none of the matter discharged from the mouth comes in contact with any sore place, as it may cause ulcers. If ulcers do appear, they may be cured by the application of lunar caustic.

COLD, COUGH AND CATARRH.—*Symptoms*—The animal is dull and stupid. Eyes weep; muzzle dry; hair sticks up; appetite bad; milk fails. Pulse sixty to ninety. Bowels costive.

Treatment—Take from it six quarts of blood. Then give a purgative as follows:

Epsom salts, one pound;
Powdered caraway seed, half an ounce; dissolved in a quart of warm gruel.

Afterward give the following, night and morning:

Tartar emetic, one drachm;
Powdered digitalis, half a drachm;
Nitre, three drachms:

Mix in a quart of warm gruel. If the bowels get costive, repeat the first dose.

House the animal, and give it a mash of bran, if there be little or no fever. Continue the above treatment, till the muzzle becomes cool and moist, and the pulse down to fifty or fifty-five.

CHOKING.—If the object which causes choking be so far down that it cannot be reached by the hand, it must be forced down the throat.—To do this, give the beast half a pint of oil; put a gag in its mouth; then take a flexible rod of some kind (a whip-handle will answer), pass it gently down the throat till it touches the object. Now press firmly and steadily upon it until it is removed.

In Spain, it is a common practice, when a beast is choked with apples, potatoes and the like, for two or three men to seize the beast, and lay its neck over a log of wood, and then strike the apple a smart blow with a billet of wood so as to crush it. This must be done cautiously, however.

TREMBLES.—This extraordinary disease prevails in some regions of the West. It is a most alarming one.

Symptoms—In the earliest stages of this malady, in the cow, it may not display its existence, if the attack be not violent, and the animal left to itself; for in the beginning, as in all stages of the disorder, the appetite seems unimpaired, and the thirst not increased. Even this early stage, not less than the more advanced, appears however to be attended with constipation of the bowels. The animal at length begins to mope and droop, to walk slower than its fellows, and to falter in its gait. If, under these circumstances it should be driven, and attempt to run, the debility and stiffness of its muscles are immediately apparent. It fails rapidly, trembles, pants, and seems blind, as it runs against obstacles, but this may arise from vertigo; at length it falls down, lies on its side quivering, and is not perhaps able to rise for several hours, sometimes never. Now and then the quivering amounts to a slight convulsion.—When the disease is not violent, the animal, after a longer or shorter period, is again on its feet; but its capacity for muscular effort is greatly impaired, and, if hurried in the slightest degree, it is seized with trembling and stiffness and may even fall again. Of the state of the circulation, when it lies seriously ill, but little is known, as the pulse has not been inspected. One observer perceived that the nose of a heifer was hot, but others have found that part and the skin generally cool. Perhaps their observations were made in different stages of the disease. While lying unable to walk, the animal will still eat freely, and also take drink, but does not seem to have excessive thirst. Its costiveness continues to the last, when the malady goes on to a fatal termination. Of the symptoms which precede dissolution, we could no obtain a satisfactory account. Our witnesses generally declared, however, that the abdomen does not swell in any stage of the disease. When it assumes a chronic form, the animal is liable, for weeks and even months, to muscular infirmity under exercise; looks gaunt and thin; its hair assumes a dead appearance, and sometimes falls off in considerable quantities, especially from the neck.

Treatment.—"We met with no medical gentleman," says Dr. MacIlhenny, "who had subjected animals laboring under this disease to a systematic, or even varied, empirical treatment. All the people of the district have one and the same indication to fulfil, that of opening the bowels. When this can be effected, the animal, they say, scarcely ever dies—when it cannot, death occurs. For the fulfilment of this indication, epsom salts have been administered in very large quantities, even to pounds, but without effect. Drenches of lard and various mixtures have also been given, with no satisfactory result. Judge Harold, near South Charleston, has exhibited calomel, followed by lard—no essential benefit. Dr. Toland has administered the oil of turpentine, in doses of eight, twelve, and sixteen ounces, without advantage. An opinion is prevalent, that drenching animals injures them by causing them to struggle. On the whole, we found among the people of the district a total want of confidence in all kinds of cathartic medicines, and an exclusive reliance on Indian corn. Some preferred old corn, some new, and others that which had been frost bitten. This is fed to all those species of animals that are accustomed to eat it, and is said never to be refused. The more the animal will eat, the greater is the hope of the owner. It is said to produce purging, when every other means have failed, and then it is affirmed, recovery is almost certain.—On these points we found but one opinion in the district. Several of its physicians, after trying other things, had, with the people settled down on this.

"We found blood-letting not in favor. Dr. Toland supposes it has, generally, been employed at too late a period. Many non-professional persons spoke of having resorted to it without advantage, and some thought it had done harm.

"Throughout the disease, rest is considered a sine qua non to the favorable effect of any measure, and is of itself in mild cases sufficient; that is, if they be not aggravated by exercise, the disease will wear itself out, or spontaneously subside."

Cure for Dog Distemper.

ED. VALLEY FARMER: Take two handsful of salt and mix with a little water; let a man hold open the dog's mouth while another person throws the salt down his throat; feed the dog on crackers and meal for a few days. If the disease is long seated, give another dose the following day. It acts as a purgative and emetic, and is the most simple and ready cure I know of.

E. R. S.

Anna, Union Co., Ill.

EFFECTS OF HUNGARIAN GRASS.—A gentleman from Will county relates to us the following, as being the experience of one of his neighbors. Having grown and fed considerable to his stock the present season, several of his horses became stiffened and almost useless—one, a fine mare, died. Determined to know, if possible, what ailed her, he opened her and examined thoroughly, and discovered in her stomach a ball of Hungarian grass seed, weighing from seven to eight pounds, so hard that it was with much difficulty

it could be broken apart. Acting on this discovery he gave his other horses a dose of castor oil, when very soon masses of seed were passed from them, apparently parts of such described balls, some pieces as large as eggs.—[*Prairie Farmer.*

Cattle vs. Horses for Farm Work.

ED. VALLEY FARMER: Why is it that working cattle are becoming so scarce on our farms? Where there used to be a dozen yokes, scarcely one can now be found. We believe that the banishment of working cattle from the farm is bad policy. We believe they are better for farm work and more profitable, as workers, than horses, and we shall endeavor to prove our position to the satisfaction of your readers; and we think if we shall be the means of reinstating working cattle upon our Western farms we shall have rendered a service to farmers.

Cattle, in the first place, are more exempt from disease than horses. The latter are liable to almost innumerable diseases and injuries. They have the spavin, ring-bone, sweeny, poll-evil, big-head, big-jaw, bots, colic, glanders, and a hundred other diseases that cattle are not subject to. This is an item of considerable importance. If a gelding becomes lame, he is injured for life, and his value is materially lessened, if not entirely destroyed. If the ox becomes lame he is as valuable for beef at any time, if in good order, as for work, or nearly so. When old age comes upon a horse he is valueless—his carcass becomes food for buzzards and crows; not so with the ox; for when he arrives at a respectable old age, he will sell just as well as a younger animal for beef. This is another important item to somebody; for the horse must "give up the ghost" upon some one's hands.

Where heavy work needs doing, such as deep plowing, sub-soiling, hauling logs, etc., several teams of cattle can be very easily joined—while every one knows how difficult it is to join several teams of horses. This is a very important item. Our farms need to be plowed deeper than a span of horses can plow them. Nothing will pay the farmer so well as to plow his land from twelve to eighteen inches deep. With two or three yoke of cattle this is a very easy matter; and the crop put on ground thus plowed will produce from one-third to one-half more than if plowed as is commonly done with one span of horses.

Cattle require less care and attention, will bear more ill treatment, and live upon coarser and less food than horses; though good attention should be bestowed upon them as well as all farm animals.

The vast numbers of horses required by the present war will materially increase the price of horses, and we write this now to tell your readers that they had better buy cattle than horses. The outlay for a team or teams is not near so great. To the poor man who has not got the means, and to the rich man who has not the money, but the credit, we say buy cattle. If you lose cattle, the loss is not so great—but there is less danger of losing cattle than horses.

It is true they will not work quite so fast, but they will do the work more thoroughly. Much depends upon the training and treatment of cattle in regard to their speed. We have seen cattle which would perform nearly as much, or quite as much farm work as horses. They can be trained to walk with spirit or to mope along. For tending corn and other crops, horses are better than oxen—though we have seen single cattle working just as well in corn as single horses. They can be very easily trained by kind treatment to work singly before the plow and wagon. Economy being now required, we throw out these hints for the consideration of your readers.

J. M.

Boone Co., Mo., Dec. 2nd, 1861.

MEDICAL QUALITIES OF CARROTS.—Stewart, in his excellent work on Stable Economy, says: "Not only do carrots give strength and endurance to sound horses, but also give recovery and health to such as are sick. There is nothing better, perhaps nothing so good. When first given, they are strictly diuretic and laxative, but as the horses become accustomed to them, these effects cease to be produced. They also improve the state of the skin. They form a good substitute for grass, and an excellent alterative for horses out of condition. To sick and idle horses they render grain necessary. They are beneficial in all chronic diseases connected with breathing, and have a marked influence on chronic cough and broken wind. They are serviceable in diseases of the skin; and in combination with oats, restore a worn horse much sooner than oats alone."

LICE ON CATTLE.—Justus G. Lewis writes the *Prairie Farmer* that if animals are washed all over with soft soap of about the consistency of very thin batter, it will not take the hair off nor injure the animal, and it will destroy the lice. One application is usually enough. It is the best remedy he ever tried or read of.

SOME HOG.—A hog was recently killed in South Danvers, Mass., that weighed 1108 pounds alive, and 1000 pounds dressed. The dimensions of the pig were, girt 7 feet and 3 inches, height 3 feet, length from tip of nose to root of tail, 8 feet, from tip to tip 10 feet.

HORTICULTURAL.

[Written for the Valley Farmer.]

ON PLANTING TREES.

First of all, there must be a rich, deep, mellow soil. Second, it must be dry; this last cannot be dispensed with. Wet soil will rot the roots. This accounts for many dead trees that cannot otherwise be accounted for. Sometimes the tree is stunted; dig down and you will find some of the roots dead. Depend upon it, a wet soil will first blacken, then rot the roots. Of course, water-seeking trees are exceptions. It is a law in nature that the roots and branches harmonize. Lop off a root, and the tree suffers—perhaps a branch dies; cut off all the roots, and the tree dies. You may do this as effectually with a wet soil as with a knife. A deep ditch around the orchard, and through it, is a pretty sure guard.

Plant your tree firmly—roots and branches of equal size, or roots larger than the branches. Set it the same depth it had in the nursery: this is a general rule; but do not set it too deep.

In the fall, heap a pyramid of earth against it—say, a foot high or more. This is a protection—first, against mice—second, against the fall rains. In the spring, remove the ground. This is a certain preventive against vermin; and no one will begrudge the labor.

Prune downward. You do not wish to have your fruit in the clouds, but in reach of your hand. This pruning has many advantages. You can give your tree any shape: the umbrella form, the oval, the round; or have it flat, or square-shaped. But have the branches low, reaching to the earth if need be: it is a graceful sight. You may then stand on the ground, and pick the fruit at your leisure.

Make a pet of your orchard; you will then treat it as it deserves. Remember the limbs are tender, and nature designed a full growth. Do not intrude too much upon this right—the right of nature to her own; for it is this right that gives you the fruit. You are to give nature fair play under favorable circumstances. If circumstances are not favorable, then comes in *your* share of the work—then assist the effort of nature, and she will respond to your aid, and repay you with bounty. Such bounty is enjoyable when it is the united effort of the man and the tree. Such harmony should be the conduct of life, in all its vocations. F. G.

[Written for the Valley Farmer.]

THE VINEYARD.

THE INFLUENCES OF LAST SEASON ON THE FOLLOWING CROPS.

The last season was so disastrous in its influences upon the Catawba and Isabella crop through this State, and so different from any of the preceding ones, that some remarks about it, and the probable consequences upon future crops, may not be out of place.

Up to midsummer, almost until the grapes attained their full size, our vineyards looked truly splendid, and promised an enormous crop. Then a small white insect showed itself, which fed on the inner side of the leaves. At the same time, or soon after, the weather changed suddenly, from very cool to scorching hot, and the effects upon the vines were disastrous in the extreme. The leaves scorched, turned brown, and dropped off, leaving the fruit exposed to the scorching rays of the sun, and very soon the stems of the bunches began to wilt, and the berries to drop off; and only those hardy varieties, which did not suffer from the disastrous influences of the weather, ripened their fruit well. These are the facts before our eyes, now let us see if they will have any consequences upon future crops. To demonstrate this we need only look into the nature of plants, and the functions the leaves perform.

Leaves are the lungs of plants, and serve to elaborate the sap, to ripen the fruit, and also ripen and perfect the wood. Therefore, as soon as the leaves are removed, the plant must suffer, it cannot perfect the fruit, nor will the wood for next year's bearing be fully developed and ripened, and the sap will necessarily stagnate; in fact the whole plant is in an unhealthy condition. A vine in the forepart of a season may have made a rapid, strong growth of wood, and be seemingly healthy, and the inexperienced vintner will prune it according to its outward show, and count upon a good crop to follow, only to be sadly disappointed, for the enemy is already at work. The vine may even start vigorously, but as soon as the young fruit begins to tax it for nourishment it will droop—and rot, and mildew, and all the other diseases the Catawba and Isabella and many other varieties are subj-

first vegetable

will follow. I have heard many express the hope that a good crop next season would make up for the disappointment of the past. I wish they were right, but I do not expect that their hopes will be fulfilled, but that the disastrous consequences will be felt for several years to come. The only remedy is, to cultivate other varieties which are not subject to these vicissitudes of the weather, and which will flourish and produce every year. Among these, the Concord, Norton's Virginia, Herbemont, North Carolina Seedling, Cynthiana, Arkansas, Hartford Prolific, Louisiana, Northern Muscadine and Taylor's Bullitt, are the most to be recommended. Among those which suffered severely, were the Catawba, Isabella, Delaware, Early Isabella, Marion Port, Garrigues, Brown and Logan. GEORGE HUSMANN.

GRAFTING THE GRAPE.

N. J. COLMAN, ESQ.—*Dear Sir*—The subject of grafting the grape has become one of very much importance. May I have the use of the columns of your journal to propound a few inquiries for my own benefit and for the benefit of all interested in grape culture? Some of your contributors are known to have been very successful in grafting the grape. Among these I may mention Messrs. George Husmann, William Muir, and Emil Mallinckrodt, and I might perhaps mention other names. Now what I desire is their experience, and I call their attention to the following questions, and hope each of the gentlemen named will reply specifically thereto:

First—Do they graft the vine above or below the ground?

Second—Do they graft *before* or *after* the sap has flowed in the spring?

Third—What is the best age for both stock and cion for grafting?

Fourth—If the graft is inserted below the ground, how far below the surface should it be inserted?

Fifth—Is any paper or cloth, or grafting clay or wax employed about the union of graft and stock?

Sixth—Which is the best time to take off cions; and which the best method to keep them till grafting season in a proper condition?

Seventh—How are the cion and stock prepared to be united, *i. e.* what is the method of grafting pursued?

Eighth—Give the complete *modus operandi*, and make any suggestions that will be valuable [illegible] are grafting for the first time.

Ninth—Is there any difference in varieties in grafting, and if so, which varieties are the easiest and which the most difficult to graft?

If the gentlemen alluded to will have the kindness to answer these inquiries, and give us their experience, they will confer a real favor upon the public. Yours, &c.,

PRO BONO PUBLICO.

St. Charles Co., Mo., Dec., 5th, 1861.

[Written for the Valley Farmer.]

Take Care of Your Fruit Trees.

Fruit trees should be protected. They should be considered as part of the stock of the farm. They are tender, and require care. Cold hurts them. If penetrating and severe, it will kill them—for vegetable life is *life* notwithstanding. If exposed to raw winds in the spring when the bud is advanced, it will injure it. And cold rains, when the tree is in blossom, especially the long-continued rains from the East, which are common in many parts of the country, will seriously affect the crop, if not entirely destroy it. These long rains are to be dreaded. We pity the tree when in this incipient stage of maternity it is thus made to suffer. We feel like holding a shelter over it—the thought is not an extravagant one; and we have no doubt the time will come when this will be done. Why not? Why not now? We have never tried it; but we propose it—propose that a temporary guard be erected, in the form of an umbrella, movable at will. I am persuaded, with choice fruit trees, it would pay. Let some one take the initiative. We all know the effect on trees that are sheltered by buildings. I have seen it more particularly this year when the fruit is almost a failure, in this section of the country. Where whole orchards are concerned, the case is more difficult. A hill is a protection. Though care should be taken to have the orchard on the lee-side of prevailing spring winds. The south side is generally preferred; but I think without due reason. We are to deprecate the frost as much as the spring rains. And the increased warmth of a south-side situation advances the blossom, and endangers it the more with the frost. But the best of all is a row of tall evergreens. Pines are excellent for that. They have more branches than in the woods, and the branches extend further down. For vineyards and gardens, and fruit trees of lesser growth, there is nothing equal to the Balsam, both as to beauty and impenetrability. An evergreen, it is a protection the whole year round. But there are many trees that will do.

This adds to the beauty of a farm, and affords shade for the herd in summer; and will more than repay for the "incumbrance," as some people consider it. F. G.

[Written for the Valley Farmer.]

The North Carolina Seedling Grape.

This is one of the new grapes which I think deserves extensive culture. It has fruited with us for two summers, and the good quality of the fruit, its extreme earliness, (being a week earlier than the Concord), the fine size of the bunch and berry, and the healthy habit of the vine, will recommend it to every lover of good fruit. It is slightly subject to the rot, but not enough to seriously injure the crop, and will also make a fine wine. The vine has the same healthy, robust habit as the Concord, and I think will prove equally hardy. It is a strong grower, and will I think prove productive. Bunch medium to large, compact, shouldered; berry, large, oblong, black, pulpy but very juicy and sweet, with a perceptible foxy but not disagreeable flavor, resembling the Isabella, of which it is evidently a seedling, but much sweeter and better. Ripens the latter end of July to first of August. Ought to be in every collection, and will prove very valuable as a market grape.

GEORGE HUSMANN.

[Written for the Valley Farmer.]

GARDEN HINTS FOR JANUARY.

By Carew Sanders.

THE VEGETABLE GARDEN.

This is the most necessary, if not the most important, portion of the garden to the majority of housekeepers. We may subsist without flowers, and with even a small supply of choice fruits; but without a supply of fresh vegetables, in our sultry climate, we should fare very indifferently. Simple as the cultivation of culinary crops is esteemed by many, yet to raise choice vegetables requires considerable skill and attention.

Ten years ago there was a great lack of reliable information on the subject in our country—all that was within the reach of the amateur being transcripts from European works, not well suited to our peculiar climate or necessities.

The works of Bridgeman, Buist and others in the North, and White in the South, besides the numerous writers in the many agricultural and horticultural journals scattered throughout the country, have fully supplied the deficiency, and now standard works can be found, giving full and reliable directions for the preparation of the ground, and the planting and management of all popular vegetables suited to our climate.

It is not to be expected that in a single short article once a month, full and explicit directions can be given for all the numerous and varied operations of the garden, and those readers who desire fuller information are referred to the works named above.

Soil.—Without a rich soil, either naturally so, or improved by culture, and the application of enriching material, we need not hope for good crops. Clean, deep and thorough culture is the means. There should be a regular rotation of crops—that is, no two crops of a similar nature should be planted in succession on the same soil. To facilitate this rotation, the garden should be divided into squares of nearly uniform size—say into six squares, with cross-walks wide enough to admit a cart.

Manure.—Well composted barn-yard manure is the most reliable for general purposes. For contingencies or special purposes, super-phosphate of lime, bone-dust, and guano, may be used—the latter with great caution, and only in moist weather, or in a liquid state, well diluted. —[*Buist.*

Many persons are at a loss to know what quantity of seeds to purchase for a given space of ground, or to supply a family of a given size, the following table, prepared by persons who know, will be useful to such purchasers, premising of course that, as tastes differ, the varieties may be varied to suit each individual or family. Some of these articles not commonly cultivated, or not relished, may be left out altogether, and others more liked may be increased in proportion, and so on.

The list is intended for a garden of half an acre.

1 oz. asparagus.	¼ oz. brocoli.
4 qts. beans, of sorts.	1 " okra.
½ oz. cauliflower.	2 " onions, of sorts.
4 " cabbage, of sorts.	1 pkt. parsley.
¼ " celery.	1 oz. parsnips.
4 " cress.	1 pkt. pepper.
½ " cucumbers.	½ oz. pumpkin.
1 " carrots.	8 qts. peas, of sorts.
1 qt. early corn.	8 oz. radish, "
1 pkt. egg plant.	½ " salsify.
½ oz. endive.	½ " squash.
½ oz. leek.	4 " spinach.
1 qt. lima beans.	½ " tomatoes.
1 oz. lettuce, of sorts.	2 " turnips.
2 " mustard.	6 papers pot and sweet herbs.
2 " melons.	
4 " beets, of sorts.	

Of the above list, there are a few not much grown or used here, or perhaps it is only mustard and cress, and for these other salads better suited to the climate are substituted. The indispensable articles in all families are, Asparagus, Beans, Cabbage, Cucumbers, Melons, Squash, Corn, some or all of the root crops, Radish, Lettuce, Onions, Beets, Tomatoes, Endive, and Celery, either as salads, relishes or flavorings. Brocoli and Cauliflower, being rather more difficult to produce successfully, and withal being somewhat of the nature of the Cabbage, may be left out, or not, at the option and taste of the cultivator. Both these and Celery require a little more than ordinary skill and care to succeed well in their cultivation, but where it is bestowed, they well repay for it. Egg-plant, Okra, Salsify, and Spinach, though easily raised, are not equally admired and desired by all persons, and may or may not be cultivated.

Asparagus.—This is the very first vegetable

of spring, and on this account alone is very desirable; for as soon as vegetation commences in spring, and while we are yet only sowing other garden crops, or they are but just germinating, the Asparagus commences to throw up through the soil, its thick, fleshy, marrowy shoots, and is ready at once for the table, requiring no dressing, preparation, or care, other than to cut it off, wash and plunge into the pot, boil and serve up, with or without melted butter, and then—what a luxury! in all the list of vegetable products, not one is more delicious; and from its early season, its quality, and productiveness, not one is more acceptable or profitable.

Many old gardeners have thrown a sort of mystification around this vegetable—that it was hard to cultivate, required special manures and treatment, was long coming into bearing and so on, and hundreds have run away with the idea, that it is an expensive luxury, unproductive, and not adapted to plebeian gardens or tables. Nothing can be more erroneous than all these assumptions. On the contrary, it is one of the easiest vegetables of all to cultivate, yielding readily to generous treatment; rewarding well for it; not refusing to pay for even fair to ordinary culture; productive, yielding as much actual food in weight per acre, as cabbage or turnips, and is equally adapted to the table of the poor as the rich man, requiring only a little salt when boiled to render it vegetable marrow indeed.

Thousands have been deterred from cultivating it from erroneous ideas regarding it. It is true it does not commence to yield the first year, nor much the second, but then it should be remembered that a bed once made is to last a lifetime almost, and this should always be taken into account in the formation of the bed, both for the sake of its durability, and of its producing a first-rate article while it lasts. When a bed has come into bearing, all the after culture it needs is simple and easy. The stalks that come up after cutting is done, will generally keep the bed clear of weeds. These stalks are all cut off in the fall, a top-dressing of rich manure applied every two years or so, to be forked in, in spring, and all is done.

Making the Bed.—Now as to the making of an asparagus bed. The best spot in the garden will of course be chosen, where the soil is deep and rich, but not wet, or too clayey and stubborn. If digging a bed two or three spades deep with the spade seems too much labor, use the plow, and sub-soil or trench plow; let these be run through the plat of ground several times, not less than fifteen inches in depth, and a good dressing of rotten manure plowed and harrowed in, and mixed with the soil as well as these implements will do it.

Planting.—Then set out your asparagus plants, in rows four feet apart, and eighteen inches in the rows (if you want to make horse culture of it), or in beds of four rows, eighteen inches apart, if for garden culture. One year old plants, that have stood thin and been well cultivated are better than older. They will have roots a foot or more long, and proportionally stout, while older plants with longer roots are more likely to have the long roots cut or broken off, giving the crowns a greater check, which one year old plants will make up for and more. Spread out the whole of the roots the full length, in planting, along a trench, which may also be made with the plow, covering the crowns two or three inches below the surface, and making all smooth and level over them. Or, as some assert is preferable, the seed may be sown where they are to remain. Soak the seed for 48 hours, and drop two or three seeds in a place the requisite distance apart, in shallow drills, thinning out to a single plant in a place, if more than one comes up and grows. The advocates of this plan say that no time is lost, but that the bed is fit to cut from as soon as if one year old plants had been used. But we prefer the plants.

Of course for the first year or two of the beds' existence, more time and care will be required in hoeing and keeping the beds clean and free from weeds than ever after, as the young asparagus will not yet be sufficiently strong to smother down all weeds, as they will be when the plants are a year or two older. If perennial weeds intrude into the beds, such as Docks, Clover, &c., they must be rigidly kept out. Though if they have been well attended to for the first two or three years, there will be little trouble after.

TO INCREASE THE SIZE OF FRUIT.

The celebrated Prof. Dubreuil points out ten ways by which the size of fruit may be increased; and as fruit raisers are discovering that fine specimens bring a higher price in city markets, these modes may be worthy of some attention. We condense his rules:—

1. By dwarfing.
2. Thinning the branches by pruning.
3. By keeping the bearing shoots short and near the centre of the tree, small specimens growing on the tips of shoots.
4. Thinning the fruit.
5. Shortening-in.
6. Supporting the fruit on its foot stalk.
7. Diminishing evaporation from the surface.
8. Moistening the surface with copperas.
9. Ringing.
10. Inserting spurs of old trees on vigorous young ones.

These different modes have various degrees of merit. Dwarfing, by working on smaller growing stocks, sometimes produces striking results. Some varieties of the pear are of little value, except on quince stocks. A successful marketer of pears has informed us that he would propagate the Bartlett in no other way; for although the tree might perish after one or two crops, (as it does not commonly endure long as a dwarf,) yet the double price he obtains for the larger and finer specimens, more than repays all expenses.

Thinning the branches by pruning, and thinning the fruit on the branches, the 2d and 4th modes, are important, and applicable to all species from the currant up to the largest sorts of apple. Crowded shoots produce crowded and half grown leaves, and half grown leaves, as a natural consequence, give us only half grown fruit. This mode should always be adopted in connection with *good cultivation*, the most important of all modes to grow large fruit, but omitted by Prof. Dubreuil. We have tripled the size of the Seckel pear in a single season by breaking and mellowing the whole surface beneath the trees; and have known the St. Ghislain so much improved in flavor, as well as in size, that it would scarcely have been recognized.

Under the seventh head — diminishing the evaporation — we are informed that fruits covered with leaves are larger than on the same trees not shaded. The increased size of fruit grown in bottles, is also mentioned as another example, the confined moist air "keeping the epidermis pliable." We think another and equally important reason is the expansion of the fruit by the increased amount of water it is thus made to hold. Many have observed that winter apples grown in dry seasons, are smaller, firmer, higher flavored and keep longer than those which grow in wet summers. The increase in size is therefore at the expense of flavor and keeping, and detrimental to the value of all the milder flavored varieties. Some very rich or acid sorts, as the Esopus Spitzenburgh may bear diluting. The small fruits, as raspberries, strawberries, currants, &c., are desired as large as possible, and irrigation, to supply abundant moisture, sometimes produces very desirable effects. We have observed strawberries doubled in size in twenty-four hours, as compared with others beside them, by the accidental drip from a water-cart.

A case is mentioned where moistening an Easter Beurre pear with a solution of copperas, from the time it was fairly set, once a fortnight, produced "a fruit so large that it could scarcely be recognized." What was the operation of the copperas? Was not this result partly accidental at least? It is easily tried. We have not very great faith in what the darkey called "apotekary manure."

Ringing the shoots may do well for producing curiosities. In order that the callus may exude and close up the removed bark, the width of the ring should not exceed one-fifth of an inch. This mode has been tried frequently on the hardy sorts of grapes, and the result is quite marked, but as the increase in size is usually at the expense of flavor, and also injures the vine, it will not be likely to be much adopted.

The other modes—inserting spurs, supporting the fruit, &c., will do where specimens for exhibition are wanted, but are not proposed for profit.—[*Country Gentleman.*

[Reported for the Valley Farmer.]

Meramec Horticultural Society.

ALLENTON, December 5th, 1861.

The third annual meeting was held—the President in the chair. The minutes of the former meeting were read and approved.

The committee on the "Varieties and Quantities of Fruit Proper for a Family Garden in this Locality," presented another instalment of their report, viz., Peaches, which was discussed, amended, and adopted as follows: Twenty-five peach trees for a family fruit garden. Early Tillotson 2, Hayne's Early 3, Large Early York 2, Old Mixon Free 2, Yellow Rareripe 2, President 2, Old Mixon Cling 2, Columbia 2, Late Red Rareripe 2, Snow 2, Late Admirable 2, Heath Cling 2.

The Secretary said the Tillotson was a fine, tender, juicy, very early peach; they were too ripe for marketing on the 26th of July. Came as early into bearing as most others, was healthy, hardy, and a good grower, and seemed well adapted to our uplands.

Dr. McPherson thought that the complaint of its being too small was in consequence of overbearing and want of attention. He wanted a larger proportion of the VERY EARLIEST varieties of fruit, for all ate it with more eagerness than the later varieties.

Mr. Mudd, on call, said he had no experience with the Tillotson here; had not planted it; tried it three different times in Illinois, and it failed when other varieties did well; the extremities had a tendency to mildew.

HAYNE'S EARLY.—Dr. McPherson had fruited it and found it to do well. It was large, juicy, fine flavored, handsome, and in every respect excellent; had sold them last season, and, notwithstanding the depressed state of the market, got three dollars a basket for his first shipment (22nd July).

PRESIDENT.—Mr. Allen thinks highly of this peach, finds it an even bearer, large, juicy, fine flavor for a white peach, and comes in excellent season for drying; would not do well for transportation, being too tender.

LATE RED RARERIPE.—Mr. Allen can recommend this; it is large, handsome, delicate, juicy, but also very soft. The President thinks it has one valuable quality in a family fruit garden, that of ripening gradually thereby affording good ripe fruit for a long time from the same tree.

The committee presented a report on the "Varieties of the Peach for an Orchard of 500 Trees for Market." Laid on the table.

The Secretary and Treasurer presented his annual report which was received and adopted.

The election of officers for the ensuing year was then in order, when the following persons were elected:

President, Dr. L. D. Morse; Vice Presidents, Dr. J. B. H. Beale, Charles Paffrath; Recording Secretary and Treasurer, William Muir; Corresponding Secretary, T. R. Allen; Executive Committee, Dr. A. W. McPherson, T. R. Allen, Ed. Vaughn; Librarian, T. R. Allen.

The Fruit Committee reported: Your committee are well pleased to find a fair display of fruit on the tables to-day. The varieties being more numerous than usual give us the opportunity of learning the quality of many good winter varieties that we have not met with heretofore.

Mr. P. M. Brown exhibits 7 varieties of apples; Fall Queen, very fair; Ortley, very fine; Willow Twig, good; Jeneton, Wine Sap, Rhode Island Greening,

showing a want of attention in pruning and consequent overbearing; and one very excellent apple wanting a name.

Mr. T. R. Allen makes a good show of 7 varieties: Jeneton, large, but wanting in color; Newtown Pippin, very fine; Winter Rambo, fine; Pryor's Red, Willow Twig, and Priestly.

Mr. F. Braches has Newark Pippin, Rhode Island Greening, and Borsdorfer—three good apples.

Mr. Henry T. Mudd, fine specimens of the Fallawter, Hubbardston's, Nonsuch and Fulton—three very excellent and valuable varieties. Mr. M. thinks the Fallawter will become one of our most valuable winter varieties.

Judge Becker sends us (would that he could have come himself) a grand display of his extra well grown apples, and two very good pears without a name. The Judge as usual takes the palm with several varieties (of which he sends 9 in all) first class apples. Ortley, measuring 13 inches in circumference, very finely colored, and pronounced by all the finest specimens ever exhibited in the Society. White Spanish Rienette, Jeneton, Winesap, Pryor's Red, Golden Rienette, Newtown Pippin, Pennock.

Mr. Chas. Kincaid sends Newark Pippin (of Mallinkrodt), large and fine.

Mr. J. S. Seymour shows very fine specimens of the Vicar of Winkfield, handsomely colored, and in good eating condition.

Judge Tippett sends us a seedling raised by Mrs. T., large, very richly colored, sweet, crisp and juicy.

A. W. McPHERSON, Ch.

Vegetable Committee report upon the table the Nansemond Sweet Potatoe by T. R. Allen; and White and Blue Neshannocks, by L. D. Votaw.

O. KITTREDGE, Ch.

Mr. L. D. Votaw presented samples of the richest Cider or Apple Wine ever tasted by the members, of two qualities, made by boiling down good cider; in one case 5 gallons to 3, and the other 5 gallons to 2, and then allowing it to ferment. It was rich, sweet, and strong, and very pure.

It was on motion, RESOLVED, "That the Constitution be so construed as to mean that the Committees on Fruits, Flowers and Vegetables shall hereafter be appointed by the President."

The President expressed the pleasure it gave him and the Society to meet their friend, Mr. H. T. Mudd, and their appreciation of his kindness in bringing samples of three such valuable apples to their notice, and requested Mr. M. to state for their information what he knew concerning them.

Mr. Mudd replied that the Hubbardston Nonsuch was an apple much grown in the East, although not much here; was a fine grower, good bearer, and during November and December was in fine condition for eating. Planted in Illinois, he had found it to be tender as most of the New England fruits were, but here it seemed quite at home.

The Fallawter was a native of Pennsylvania, was a strong grower, a good bearer, and did well in Illinois, and promised equally well here—he had kept the windfalls till March. Bruises affect it but very little, and do not spread through the fruit as in other varieties.

The Fulton is a new variety, and a native of Fulton Co. Ill., is a fine, handsome tree, hardy, good bearer. The original tree, still standing in Fulton Co., has fruited regularly for twenty years—and in Illinois it brings more money as a market fruit than any other.

Dr. McPherson asks if very large fruit are as desirable for market as those of medium size.

Mr. Mudd thinks that at least fair sized apples are wanted for market. Large apples generally fall from the tree—are often deficient in flavor—are generally soft in their texture, and sustain more damage in transportation than smaller ones. The Ortley and Yellow Bellflower were cases in point; although they always sold well, it was so difficult to get them to market in proper condition. There were smaller varieties that were more profitable; but, where with size they had fine form and color, bore transportation well, did not bruise easily, and hurt but little when bruised—such an apple was more valuable on account of its size, and such was the case with the Fulton.

Mr. Seymour always finds a very large apple deficient in flavor, and of a coarse texture.

The President announced the next meeting to be held at Allenton School House, on the first Thursday of January, at 10 A. M.

On motion the meeting adjourned.

WILLIAM MUIR, Sec.

FRUIT FARM OF E. R. MASON.

We are always pleased to record worthy efforts in fruit culture. The raising of fruit is yet but in its infancy. Much progress has been made in fruit culture during the past twenty-five years, but it is nothing, we believe, in comparison to what will be made in the next quarter of a century. The raising of fruit is one of the noblest and most refined vocations that exists. To be successful in it, intelligence and enterprize are required. We are pleased to see a large number of new fruit establishments in Missouri and Southern Illinois. We know of no other business so profitable, or so desirable. Among the many worthy efforts being made in fruit culture, those of E. R. Mason, Esq. near Webster Station, St. Louis Co., are deserving of being mentioned. When it is borne in mind that Mr. Mason has been engaged only about eighteen months in his enterprize, we think it will be said that he has accomplished a good deal; but it is but the initiatory step of his undertaking.

The location is one of the most desirable in St. Louis Co., being high and overlooking the surrounding country. Six and a half acres have been well prepared and planted in grapes—chiefly of the Delaware, Concord, Hartford Prolific, Diana, Clinton, Norton's Virginia and Bullit.

Mr. Mason has planted out 99 varieties of apples principally for the purpose of testing them to ascertain which succeed best in our soil and climate. He has also planted 600 dwarf pear trees, which made a beautiful growth the past season; 500 peach trees; two acres in Lawton Blackberries, one acre in Houghton seedling gooseberries, one acre in raspberries—besides planting many other fruits for trial. His whole farm is laid out in fine avenues and walks, exhibiting taste and skill in the proprietor. Mr. Mason is making a step in the right direction, and his experience in a few years will be very valuable to those who may wish to plant trees. His determination is to test thoroughly every variety of fruit he can procure—to select the wheat and reject the chaff; and, as he is willing to freely impart his experience, the public in the end will be greatly benefitted by his laudable labors.

FRUIT GROWERS' MEETING.

The Missouri Fruit Growers' Association will convene at the Supreme Court Room, in the city of St. Louis, on the second Tuesday of January, being the *fourteenth* instant instead of the 7th, as was stated in the call of the President, in the December number of the *Valley Farmer*.

We urge upon all our friends the importance of being present. Let us have a large attendance, and an interesting and useful meeting. All who are engaged in fruit culture will be benefitted by listening to, and participating in, the discussions. We want facts and experience. Those who cannot come, will confer a favor upon the Society and upon the cause by contributing any valuable facts they may be possessed of, in writing, to the Society.

The subject of fruit culture is a very important one. Not only is fruit a matter of profit, but one of luxury and of health. Let successful fruit culturists tell us what they have done to become successful; which kinds have been profitable and which unprofitable. Fruit growers can afford to be liberal and generous in imparting their experiences, and are universally so. There is something ennobling about its culture—something which tends to liberalize the mind and make generous the heart.

We say then, come one and all to the meeting on the 14th inst., and bring specimens of fruit with you.

CURRANT CULTURE.

We maintain that every family should raise an abundant supply of strawberries, raspberries, gooseberries, blackberries and currants, for domestic use. They are nutritious, healthful, and the best luxuries that appear upon the table of the farmer. They are as easily planted and cultivated as beans, corn and potatoes. All that is required to have them, is a determination to raise them. Select an acre or two expressly for them, or enlarge the garden so that there will be room for them; plant and cultivate them as well as you do your other crops, and you can rely upon an abundance of fruit. But don't plant them in some out-of-the-way place, and expect them to do well. The best way is to plant them in ground deeply plowed, and thoroughly harrowed, and afterwards work with the cultivator between the rows, keeping out the weeds and grass. How families can get along without any of these fruits is a wonder to us. It is pretty good evidence that the farmer cares but little for the comfort and happiness of either himself or family.

But we started out to say something about the culture of the currant. Generally it does not succeed well in this climate. The summer is too long, hot and dry, and the leaves almost invariably drop in August. They are not consequently very productive.

This to some extent can be avoided by very deep plowing, selecting northern slopes, and planting on the north sides of high fences or buildings. But we have found by both experience and observation, a far more effective agent in preventing the dropping of the leaf, and in keeping up a vigorous, healthy growth throughout the season, and that is mulching. If straw, prairie hay, leaves, or litter of any kind, is applied eight or ten inches deep all over the ground, in the currant plantation, the effect will be marvellous. If a deep soil and a northern exposure can be selected, it is so much the better; but deeply mulched, they will do well almost any where. In this climate, but little pruning is needed, especially for the first three or four years. It is also better to raise them in the bush form instead of tree form, as is practiced to a considerable extent in a more northern climate.

A most pleasant wine is made from the currant; and the various uses which can be made of it when green, ripe and dried, should render it a universal favorite. It is very easily propagated by making cuttings of about a foot long, of the previous season's wood, and planting them in fall or early spring, The rooted plants should be set in rows about five feet apart, and if the ground is well prepared, and a heavy mulching applied, it will keep down the weeds, and render any further culture for several years unnecessary.

FRUIT HINTS.

I have met with decided success in using tobacco stems as a preventive for the peach-borer. Frequent examinations since early last spring have revealed but one borer. I renew the supply of stems as often as I deem advisable, and find no injury to the roots from them. I have also acted on Miss Morrill's hint relative to the application of saltpetre, alum or salt, as special manures for the peach, and with promising results. I sprinkle them on the soil to within about a foot of the trunk of the tree.

My trees, which were inclined to be sickly and of puny growth, are now in splendid condition, and this season made a very strong, healthy growth, and from summer pruning, are sending out strong, thick branches, some sweeping nearly to the ground, offering complete protection to the trunk from the scorching sun.

Last season, I used Gishurst's compound for slugs on my pear and cherry trees. This season I have used nothing but whale oil soap, which I find quite as effectual and more beneficial to my

trees, as it gives a healthy, bright color to the bark, and keeps the leaves fresh looking and free from spots. I apply it once a week or fortnight, as they may require, and the expense is but little more than that of common soap, costing here five to six and a quarter cents a pound. Instead of a syringe, I use a "hydropult," which has great forcing power, and its flexible tube renders it far superior to the syringe in application to the under side of foliage—[*H. C. Van Tyne, in Horticulturist.*

LANDSCAPE GARDENING.

We were never struck more forcibly with the value and importance of landscape gardening than at a recent visit to the residence of H. N. Kendall, Esq., at Upper Alton, Ill.

Mr. Kendall has a fine residence and superior grounds for the exercise of the skill and talents of a landscape gardener. None but a practical landscape gardener however would know how to take advantage of the salient points in the landscape to develop a scene of rare beauty. But to a man whose taste has been frequently exercised, who loves his profession, and labors to create a perfect picture, as the artist labors upon his painting—the work is easily done, and the whole scenery is changed by the magic hand of the devoted landscape gardener into a scene of almost enchantment.

Mr. Kendall has been fortunate in the selection of an artist. He has secured the services of M. G. Kern, Esq., a resident of Alton, Ill., author of a popular work on landscape gardening, and in our judgment one of the best practical landscape gardeners in the West, if not in the United States. Those who are qualified to judge, who have witnessed the creations of his mind and hand, accord to him the highest praise. He is a true imitator of Nature, labors to assist her and develop her varied beauties, instead of going counter to her teaching.

Two beautiful ponds, or sheets of water have been made; a long, magnificent carriage road is being made around the grounds, necessarily crossing by a suspension bridge one of these ponds, and sweeping gracefully by the other on its banks. But we shall not attempt to describe what is being done. Those who wish to see what effects a landscape gardener will produce, are advised to visit Mr. Kendall's place, and see for themselves; though it will take many years to develop all the beauties of such a place, as the trees of various kinds must have time to grow, to give effect to the scene.

Mr. Kendall has within a year or two planted several thousand dwarf pear trees, and will have one of the best dwarf pear orchards in the West. The ground has been trenched, the trees carefully planted, and have had apparently excellent treatment since. With good treatment only will dwarf pear trees thrive, and with this they will prove as successful and profitable as any other fruit.

FRUIT vs. MALARIA.

Residents in the Western States and other regions where intermittents and similar diseases result from malaria, state that a regular supply of ripe, home-grown fruit, is almost a sure preventive. Eat the fruit only when fully ripe, and eat only moderate quantities at a time, and little need be feared. The residents of such regions should, therefore, not omit the earliest opportunity for a supply. Plant large quantities of strawberries for early summer — they will bear abundantly a year from the time they become established. Plant many currant bushes—for these are a most healthy and excellent fruit —very hardy—and if in abundance, will last through all the hottest parts of the summer. The Doolittle and Orange raspberries are prouse bearers — the former very hardy, the latter generally so, but should be laid down and covered with an inch or two of earth for winter. The Rochelle blackberry, if pinched in when three or four feet high (about midsummer) will bear abundantly, and prove hardier than if the canes run up without control. The Delaware, Clinton and Concord grapes are early and hardy, and will bear in two or three years from transplanting. Dwarf apples on the Paradise and Doucin stock, will flourish in any locality, and begin to bear profusely in three or four years, and on the Paradise stock often in two years. Some varieties bear early on common stock; such, for example, as the Dyer, Lowell, Early Strawberry, Sops of Wine, Oldenburgh, Porter, Belmont, Jonathan, &c., but these will, of course, bear much sooner as dwarfs. The Bartlett, Washington, Julienne, Flemish Beauty, Beurre d'Amalis, Onondaga, Howell and Seckel pears, produce early as standards, and the Louise Bonne of Jersey as a dwarf. Houghton's gooseberry grows with great vigor. is very hardy, and in two or three years affords almost solid masses of berries on the branches.

Such fruits as the above should be planted out on every new place, as indispensable to health as well as to comfort and economy; and emigrants to new countries should take a supply with them, as the best medicine chests they can provide.

SIMPLE METHOD OF STRIKING ROSE CUTTINGS.—"Rusticus" describes his plan of striking roses in a late number of the *Gardeners' Chronicle*, as follows:

"I have been in the habit, for some years, of striking roses in what appears to me a much more simple way than is described in your paper of the 5th inst. At any time of the year, when they are to be procured, I take cuttings of any sorts of roses I want to propagate, (Moss included,) and cut the half-ripened wood into lengths of two eyes. I remove the bottom leaf, leaving the top one to rest upon the surface of the bed and nourish the cutting while it forms its roots. The hot-bed (a very slight one) in which I plant the cuttings, is made thus: On the top of a little manure, just enough to give a slight bottom heat, I place 6 inches of earth, moistened to the consistency of mortar, then cover with white sand, and set in the cuttings. I have occasionally struck every cutting, while 99 out of 100 are an average result."

CHILDREN.

Children learn from children. They learn more from each other than from their parents or teachers. It is "nature;" and they are apt to follow their inclinations. They love freedom and their own way; and when curbed, are retarded in their progress. It is a nice question—this restraint of inclination: it simply means opposition to nature—while nature is the great acknowledged standard. We are all aiming to imitate nature, yet thwart it in the education of children. It is the object of parents and teachers and moralists to subdue a certain portion of the child, which yet is as innate as any other portion. In other words, the garden of the child's mind is to be weeded; some inclinations are to be uprooted, others cultivated; and this is to form the man—not as nature designed him, but as art has trimmed him—the garden full of good weeds, clean, and thrifty. People do not reflect that it requires constant attention to keep the garden in repair, which proves that the "noxious weeds" are still unsubdued, ever pushing forward.

The child's mind is virgin soil—not soil for seed to be planted in so much as cultivation of its own indigenous qualities. It was not a mere whim of Mrs. Stowe when she presented us with "Topsey."

We have known children who have had the greatest care bestowed upon them in their bringing up, whose noxious qualities remained unsubdued. We have known those given up as "intractable," afterwards grow up to be good members of society; though the reverse is too often the case. What then are we to do? To force instruction upon a child, will not do: it will still leave it uninstructed. What then are we to do? This: cultivate the better properties, rather than eradicate the evil. How? By *example*. The mind will oppose force. It is free, and cannot be subjugated. Do what we may, it will never submit to slavery. Rather show how amiable the virtues are; and if there is any virtue in amiability, it will have its influence; if not, it should not have any. Expose children then to good influences; and, at the same time, present the odiousness of vice. Example is contagious; it wields a powerful influence.

We cannot subdue nature; but we may cultivate it. Let us then, by example, cultivate the amiable qualities; and the evil will pine from want of attention. The superiority of civilization over barbarism, is owing to imitation.

But how can we expect our children to become patterns of society when there are no examples to pattern after?—when the public is at fault; when the fireside is a scene of jars and contentions; and our associates reflect a lax virtue? It has been so in times past; it is so now in some parts of the world: but with us only in a certain degree. We have both the good and the evil presented, with an advantage over the good: we have the laws in our favor; public and social sentiment; we have no lack of examples. It is example that controls the social world; and children are eminently social. In their own society, little harm can originate. The natural qualities have full play; they repel and attract; the bitter repel, the amiable attract. And here the natural plants of the garden receive their first impetus. For the society of children is "natural," harmonious. It knows nothing of the shrinking from strangers, or the dreaded rule of parents, but a free mingling of elementary life—plants growing in the sunshine of their own genial atmosphere.

This agitation is wholesome growth. And it is done, unknowingly, by example. The older children are patterns for the younger, being further advanced than they. And thus as they grow up in their own society, they find their patterns and congenial development.

We should not fear to trust our children with their associates. Keep them at home, shut up from the genial influences of society, staid, suffering little men and women, who never know what it is to be a child, which has led some one to exclaim,

> "Good God! to think upon a child
> That has no childish days."

If there is good among men, children must possess it; for we can never shake off human nature; that came with us into the world.

The truth is, human nature is made up of good and evil, as we consider good and evil; and we must make the best of the bargain.

How naturally the child grows up with this state of things. And shall we attempt to thwart

the evident purpose of nature? Let us trust our children, and hope and strive for the best.

In the olden time the rod was the great reliance. A rigid training—even penance—was enforced. Tortures were endured. And were mankind benefitted? were they happier? happier than now, when these relics of barbarism are relaxed? We fear we would hardly exchange with those Puritan ancients.

Children! There is something in the mere sound that is pleasant—something that reminds us of flowers, or other innocent, agreeable things. Children remind us, more than aught else, of angels, and are their nearest approach. (Imagine a world without children: society would become corrupted, frozen.) A miniature human fellow, with bright eyes, and tender cheeks, and voluble limbs, full of the rudimental sympathies of our kind, ever busy on this wonderful scene of action on which he has just opened his bud of inquisitive existence—a creature

"That feels its life in every limb,"

and kicks his way into a fuller existence, which he seems determined to occupy. And well he may; for life is dubious at this stage—he seems to haste to get out of the danger.

Pets! household pets! pets in the street—pets in the field; whether at home or abroad—pets everywhere. Sorely they try our fretful humanity, endearing them all the more for that: they struggle themselves into our affections. They are the sunlight about our path; the little staff on which we lean for the future—innocent, prattling staff! What strength has it that it is so fondly leaned upon? But there is the hope; and that, wavering at times, is strong. It is hope of the morning; of the spring; of the blossom. How charming the spring, the blossom, and the morning! We could almost wish it to remain so. But it advances; and we glory in the advancement. It brings the poor widow her staff; it renews our own life, and extends it in a new copy. This is our pride and our boast. But when sickness threatens—when the flower is pale, and awaits, undemurringly, the issue; when the little feet are still, and the busy, prattling talk is hushed; when the staff is being taken away, and the future looks dark and desolate—it is then that the heart suffers a loss, that seems a loss of oneself: the great deep is broken up, and life threatens a shipwreck. Oh how important then that we present a good example to these little ones! They are to be like us—like our better selves—they are to take our place, and we wish it not dishonored.

One thing we have observed that is almost always overlooked: it is to teach the child self-reliance. It is this which makes the man. And the sooner he begins, the better. If the child is constantly under the control of its parents or teachers, it will rely upon that control, yet ever "breaking over the rules." The reason is, it craves after freedom, which is the natural element of children. Hence the straightest-kept children are always the greatest transgressors. Remove the restriction, and the *demands of society* are at once felt. This "call to duty" can not be outraged with impunity. The child finds he is a responsible being: and this responsibility will call forth powers that have lain dormant, that are new to the child. He feels he has entered another sphere, and he must do his part, *his* part of the world's doings. This stimulates to exertion. He has begun the race of life; he feels its hubbub, its fascination; and with it, its accountability. And thus the career of the man has commenced. and there is no arresting it now. But so long as the child is kept in restraint, so long he is a mere machine, guided by the parent or the guardian, or whoever may have charge of the machine.

We have seen the effect of emancipation from this thraldom. We have no fear of recommending it. We know it is thought a hazard—almost a fatal one. "You must not give the rein to the child—it will run away with it." That is the maxim. The same principle we find in our seminaries. Order is the day; the same rule for each; and despotism for all. When will people learn to rely upon themselves, upon their own lavish, unemployed resources? acquire the habit, and make the treasure their own which they gather—habits of self-acquirement and self-reliance. In this way they not only receive, they possess; they possess their own earnings, rather than the donation of others: it becomes theirs. So it is eminently with the child, which is easily susceptible of impressions, particularly habit; a thing too little thought of.

Expansion is what the child wants. Do not crimp it. But give it free scope. You may direct it, by your influence, aided by the influence of society. Compulsion is generally hurtful: experience will soon correct and direct. There is more strength in a child's mind than many wish to believe, and this strength is innate; it is therefore to be relied upon. In this respect

"The child is father to the man."

Be not a tyrant then to your children; be not

afraid of them; trust them; trust human nature; your own as it were. You are not afraid of yourself; you were not when a boy. The difficulty is, we make our own troubles; we fear too much. "Imaginary evils," you know, are imputed to mankind. We once heard an eminent doctor say of a frail child, "Give him warm clothing; send him out into the open air; make him struggle for his life. That is the way to fight a cold—to fight the grim skeleton. Action promotes growth; it develops—both mind and body—but most the body; that needs it most in children. Children will bear much: it is remarkable how much. But be kind—a child is won by a kind word."

A greater freedom, then, to children; with good examples before them. When vice presents itself, let the dangerous insinuations be exposed, and the end made clear. Do not attempt to deceive a child, for it will be sure to note the deception. Practice a fearless honesty. Be honest with yourself first, and your child will take heed of your course. Remember that upon the education of our children depends the future, which will soon be committed to their hands.

[For the Valley Farmer.]

A Young Girl's Thought of Autumn.

(From her Scrap Book.)

The sweet smile of summer
No more greets me now,
And its calm soothing breezes
No more fan my brow;
No more I am watching
The waves of ripe grain;
Ah! yes, I'm reminded
Of winter again.

For now the wild blasts
Of November are sighing,
And all the green leaves
Of the forest are dying;
The sweet tiny flower
Has now drooped its head,
And the bird of the woodland
Has speedily fled. MIRA.

Nov. 1st, 1861.

SENSIBLE ADVICE.—Professor Silliman, of New Haven, recently closed a Smithsonian lecture by giving the following sensible advice to young men: "If, therefore, you wish for a clear mind, strong muscles, and quiet nerves, and long life, and power prolonged in old age, permit me to say, although I am not giving a temperance lecture, avoid all drinks above water and mild infusions of that fluid; shun tobacco, opium, and everything else that disturbs the normal state of the system; rely upon nutritious food, and mild, diluted drinks, of which water is the base, and you will need nothing beyond these things, except rest, and due moral regulations of all your powers, to give you long, happy and useful lives, and a serene evening at the close."

WEARING FLANNEL.

The very best thing that can be worn next the skin, in summer as well as in winter, is common woolen flannel. One color has no advantage over another, except that white is more agreeable to the sight, it is more likely to "full up" in washing; but this may be almost entirely prevented, if done properly. Pour boiling hot, strong soapsuds on the garment in a tub, let it alone until the hand can bear the water, then pour off and add clean water, boiling hot, let this stand also as before; pour off and add more boiling clean water, and when cool enough, merely squeeze the garment with the hands—no wringing or rubbing. Stretch it immediately on a line in the hot sun, or before a hot fire, and as the water settles at the most dependant part of the garment, press it out with the hand, and be careful to stretch the fabric as soon as the water is squeezed out, aiming as much as possible to keep the flannel hot until it is dry. If woolen garments are treated literally as above, they will remain pliable and soft until worn out.

Recent scientific experiments, carefully conducted, prove the truth of the popular sentiment that flannel is the best fabric to be worn next the skin, as it absorbs more moisture from the body than any other material, and by so doing keeps the body more perfectly dry. Cotton absorbs the least, hence the perspiration remains more on the skin and being damp, the heat of the body is rapidly carried off by evaporation and suddenly cools when exercise ceases, the ill effects of which no intelligent mind needs to be reminded of. Hence it is that the common observation of all nations leads them to give their sailors woolen flannel shirts for all seasons and for all latitudes, as the best equalizers of the heat of the body.

TOM HOOD AND HIS WIFE.—The sweetest thing Tom Hood ever wrote was the following compliment to his wife—no doubt well-deserved:

"I never saw anything, dearest, till I knew you: and I have been a better, happier, and more prosperous man ever since. Lay by that truth in lavender, sweetest, and remind me of it when I fail. I am writing warmly and fondly, but not without good cause. First, your own affectionate letter, lately received; next the remembrance of our dear children, pledges—what darling ones—of our familiar love; then a delicious impulse to pour out the overflowings of my heart into yours—and last, not least, the knowledge that your dear eyes will read what my hands are now writing. Perhaps there is an afterthought that, whatever might befall me, the wife of my bosom will have this acknowledgement of her tenderness—worth—excellence—all that is wifely or womanly—from my pen."

WALK OF LIFE.—We talk of human life as a journey, but how variously is that journey performed? There are those who come forth girt, and shod, and mantled, to walk on velvet lawns and smooth terraces, where every gale is arrested and every beam is tempered. There are

others who walk on the Alpine paths of life, against driving misery, and through stormy sorrows, over sharp afflictions; walk with bare feet and naked breast, jaded, mangled and chilled.

[*Sidney Smith.*

[Written for the Valley Farmer.]

THE FIRST SNOW.

Well this is a rainy time,
A rain on the snow,
Which, a week ago,
Hung on building and tree
A most delicate rime;
And it lay in that way
Until to-day,
As much as to say,
"This time you shall have a chance to see."

That morning they all came forth
With the first faint light,
To see what the North
Had done that night.

It came so still
That it took by surprise all eyes;
For no one knew
Of the coming snow,
Till the curtain he drew
And saw it—first on the hill,
And then on the plain—
On roof and tree and steeple vane;—
And you know how it clings
To the littlest things.

But in the wood—
That was the fairyest scene of all—
With all the leaves still pendant
(For this, remember,
Was in September);
You could not see a sign of a twig,—
Not even a bole,
Nor the tiniest sprig,
Among the whole—
All covered o'er, and white,
Like marble trees in a marble hall;
And then the sun resplendent
Encircling all,
And streaming the forest through,
As if fairy-land had rose to view:
This was a sight!

The air was hushed—so still:
It seemed to listen, but heard no sound.
There did not shake
The slightest thing in the upland brake;
The aspen had even forgot to quake,
And the muffled rill
Had lost its trill,
And echo forgotten its round,
As if in awe
Of the scene they saw.

Now all is changed! I look in vain
Through the window-pane
For the picture of the snow;
But, as I look,
I hear a song
Of waters in their play
Singing themselves along;
And listening to the lay,
I fancy I hear it say,
"This is the snow
"Of a day ago
"Now singing in the brook."

F. G.

A good mother is worth an army of acquaintances.

THE STOMACH AND THE MIND.—Much of our conduct depends no doubt upon the character of the food we eat. Perhaps, indeed, the nature of our meals governs the nature of our impulses more than we are inclined to admit, because none of us relish well the abandonment of our idea of free agency. Bonaparte used to attribute the loss of one of his battles to a poor dinner, which, at the time, disturbed his digestion. How many of our misjudgements—how many of our deliberate errors—how many of our unkindnesses, our cruelties, our acts of thoughtlessness and recklessness, may be actually owing to a cause of the same character? We eat something that deranges the condition of the system. Through the stomachic nerve that derangement immediately affects the brain.—Moroseness succeeds amiability; and under its influence we do that which would shock our sensibility at any other moment. Or, perhaps, a gastric irregularity is the common result of an over-indulgence in wholesome food, or a moderate indulgence in unsuitable food. The liver is afflicted. In this affliction the brain profoundly sympathizes. The temper is soured; the understanding is narrowed; prejudices are strengthened; generous impulses are subdued; selfishness, orginated by physical disturbances which perpetually distract the mind's attention, becomes a chronic mental disorder; the feeling of charity dies out; we live for ourselves alone; we have no care for others. And all this change of nature is the consequence of an injudicious diet.

CURE FOR CROUP—*Ed. Valley Farmer:* The following is a certain cure for croup. I have known it to give immediate relief when other excellent remedies had failed. It cuts the phlegm and thereby prevents strangulation.

Give to the child having the croup, one-half teaspoonful of pulverized alum in a teaspoonful of molasses. Repeat the dose in twenty minutes. The same is also excellent for colds.

Yours, D.

ENERGY.—It is astonishing how much may be accomplished in self-culture by the energetic and the persevering who are careful to avail themselves of opportunities, and use up the fragments of spare time which the idle permit to run waste. Thus Furguson learned astronomy from the heavens while wrapped in a sheepskin on the Highland hills. Thus Stone learned mathematics while working as a gardener; thus Drew studied the highest philosophy in the intervals of cobbling shoes: thus Miller taught himself geology while working as a day-laborer in a quarry. By bringing their mind to bear upon knowledge in its various aspects, and carefully using up the very odds and ends of their time, men such as these, in the very humblest circumstances, reached the highest culture, and acquired honorable distinction among their fellowmen. It was one of the characteristic expressions of Chatterton, that God had sent his creatures into the world with arms long enough to reach anything, if they chose to be to the trouble.

Domestic Department.

How to Cure Hams and Sides.

I trim the hams and shoulders in the usual way, except I cut the leg off close up to the ham and shoulder, to have them pack close, and as being worthless smoked; then sprinkle a little fine salt on the bottom of a sweet cask, and pack down the hams and shoulders promiscuously, as they will best pack in, and sprinkle a LITTLE fine salt on each laying, just enough to make it show white; then heat a kettle of water and put in salt, and stir well until it will bear up a good-sized potato, between the size of a quarter and a half dollar; boil and skim the brine, and pour it on the hams boiling hot, and cover them all over one or two inches deep with the brine, having put a stone on the meat to keep it down. I sometimes use saltpetre, and sometimes do not; consider it useless, except to color the meat. I now use my judgment as to the time to take them out of the brine. If the hams are small, they will cure in three weeks, if large, say five weeks; again, if the meat is packed loose, it will take more brine to cover it, consequently more salt will penetrate the meat in a given time than if it is packed close; on this account it is useless to weigh the meat and salt for the brine, as the meat must be kept covered with the brine, let it take more or less. Leave the casks uncovered until cool. When the hams have been in brine long enough I take them out and leave them in the cellar, if the weather is not suitable to smoke them. I consider clean corn cobs better for smoking meat than anything I have ever tried, and now use nothing else; continue the smoke until it penetrates the meat, or the skin becomes a dark cherry brown. I then wrap the pieces I wish to keep in paper any time before the bugs or flies have deposited their eggs on them, and pack them down in casks with dry ashes in the cellar, where both hams and shoulders will keep as good as when packed through the summer or year. Cured in this way it is hard to distinguish between the shoulder and ham when boiled.

A large ham will often taint in the middle before salt or brine will penetrate through.

HOW TO CURE SIDE PORK.

So much for smoked meat; now if any one wishes to have his side pork a little better, and keep better than any he has ever had, let him try my way, and if he is not satisfied, let me know it through the "Ohio Farmer."

Take out the bone and lean meat along the back, cut and pack the pieces snugly in the barrel, put more salt on the bottom and on each laying of meat than will probably penetrate the meat; then boil and skim the old brine (if it is sweet) and add enough to it to cover your meat two or three inches over the top, made strong like the ham brine; and as soon as you pack your meat, pour the brine on boiling hot; it will penetrate the meat much quicker than cold brine, and give it an improved flavor.

While I was making and pouring the brine on my hams and pork just now packed, I thought the public might be benefitted by a knowledge of my way of curing meats. I therefore publish it. Try it.

GRAHAM BISCUIT.—It is said that an Arab wife can serve up a dish of dates to her lord a hundred days in the year and each day in a different manner.

Almost the same might be said of our own wheat. Graham bread I am glad to perceive is becoming a more universal favorite than it used to be, and the following is a favorite receipt in our family, which I have never seen in print. Take a small sized pan of brown flour, the usual quantity of butter-milk, soda, and salt; mix the two former thoroughly together, and having two beaten eggs and a teacupfull of cream, roll out as soft as possible. The stove must be hot to have light biscuit.

APPLE DUMPLINGS.—In every paper you will see some time or other the query, How can I make light pot pie? How can I make light apple dumplings?

Having pared and thinly sliced the apple, I rub butter in the flour nearly enough for an ordinary pie crust; mix a little soda in some water, and pour enough in some butter-milk to make it foam; any more is injurious; now moisten the crust about as soft as ordinary biscuit, roll out and butter it over lightly, then double it over once and repeat. Put in no more apples than the crust will easily lap over on, and two small dumplings are better than one large one, as they are more easily got into a bag, and take less time in cooking. When the fruit is cooked, the pastry is done, and the time of cooking must be regulated accordingly. If we cook the fruit before putting it in, half an hour is sufficient to boil an ordinary sized dumpling made in this way—though in roll form two hours are necessary. Pudding bags must be kept sweet and clean, dipped in boiling water, and well floured on the inside before using. A good sauce to be eaten with apple dumplings is as follows: To a pint of boiling water add a good slice of butter, half a nutmeg grated, two tablespoonfuls of flour, previously mixed in cold water, and half a teaspoonful extract of lemon, with a coffeecupful of white sugar; boil one minute. As far as my experience has gone, heavy apple dumplings are owing to too much cooking, or want of enough shortening, or perhaps a poor fire, and water NOT boiling to start with.

STEWED BEEF.—Housewives who are in the habit of using only steaks and roasts, make a great mistake. A capital dish may be made out of the "chuck" as the butchers call it, or the neck, when well prepared. Select a piece of meat as large as the demand of your table may require, wash it well to remove all the blood or soil from the outside, have your dinner pot perfectly clean, salt and pepper the meat well, lay it in the bottom and cover it with water; boil it from two to three hours, or till it is thoroughly tender; add half an onion, a sprinkle of sage, thyme or summer savory.

If the meat is fat, let the water all stew out a half hour before it is put on the table, and when your meat is browned well on the lower side in the gravy, turn it over and brown the other side. When ready, take it up, add a little flour thickening to the gravy, or if you have a dredge box shake the flour into the hot gravy and brown it, then add boiling water, and you will have a dish equal, and to my mind superior to the common roast beef, upon boarding-house tables.

Care must be used to turn it; and equally necessary is good judgment in having it thoroughly well-cooked.

CURE FOR DYSENTERY.—Dr. Page, of Washington, communicates to the Republican of that city the following simple remedy, long known in family practice, and which was recently tried in the camp of the New York 22nd Regiment, where there were from eighty to one hundred cases daily, and with rapid cures in every case:

Recipe—In a teacup half full of vinegar dissolve as much salt as it will take up, leaving a little excess of salt at the bottom of the cup. Pour boiling water upon the solution till the cup is two-thirds or three-quarters full. A scum will rise to the surface, which must be removed and the solution allowed to cool.

Dose.—Tablespoonful three times a day till relieved.

REMEDY FOR SORES AND CHAPS.—Every family should keep a small quantity of CHLORATE OF POTASH. We have never found anything equal to it for a simple ulcerated sore throat. Dissolve a small teaspoonful of it in a tumbler of water, and then occasionally take a teaspoonful of the solution, so as to gargle the throat. It is nearly tasteless, and not at all offensive to take, and hence well adapted to children.

Nothing is better than this for chapped or cracked hands. Wash them in the weak solution, and they will soon be well. It is also good for a rough, pimply or chapped face. It may be had of any druggist.

Editor's Table.

Thanks to our Friends.

Many thanks to many of our friends for the prompt renewal of their subscriptions. Subscriptions were never more welcome than now. Cannot many of our friends who have already subscribed obtain one or more names for our journal for 1862. The addition of a single subscriber from those who have already remitted would be a great assistance to us. Our friends must bear in mind that from a large portion of Missouri we shall receive no subscriptions, as we cannot send the "Farmer" by mail. This must necessarily considerably reduce the amount annually received from subscriptions, and we would be glad to make up the loss from other quarters. We know our readers will do all they can.

The January No. Sent Only to Those Who Renew.

The January No. will be sent to none whose subscriptions expire with 1861, until a renewal of the subscription. This will be the case even in St. Louis County, where we have before sent the "Farmer" as though payment had been received—but numbers are owing us in the county for several years, and we shall adhere strictly hereafter to the cash principle.

SORGHUM CONVENTION.—There will be a convention of the Sorghum Growers of Ohio, at the city of Columbus, on the 7th inst. This is what we like to see. When the growers get together, and tell of their failures and successes, something good will come out of it. We shall give our readers the cream of the discussions and doings of the members. The Sorghum growers of Michigan are also talking of holding a Convention.

FINE GRAPES.—We neglected to make our acknowledgements, last fall, to our friend John Thomas, of Palestine Vinery, Jefferson county, Missouri, for some most magnificent bunches of grapes, of the following varieties, viz: Black Lombardy, a seedling considerably resembling the same, Early White Mulvoise, Black Hamburg, Golden Chasselas and Burgundy. We understand Mr. Thomas is going quite extensively into the culture of grapes both in graperies and in the vineyard, for the St. Louis market, and we can assure him that he will never want for customers if the grapes he sent us are a fair sample of what he will hereafter produce.

PETERSON'S LADIES' MAGAZINE.—The January number of Peterson is promptly on hand as it always is. Why is it so eagerly sought by the fair sex? Because it is brimful of interesting stories. The ladies all like Peterson. He gets up a popular Ladies' Magazine. It contains fine illustrations, is finely printed, and some of the best writers are contributors to it. The new year commenced with January, and those who have not subscribed should do so immediately. Terms: One copy, one year, $2.00; three copies, $5.00; eight copies, $10.00. Address C. J. Peterson, 306 Chesnut Street, Philadelphia, Pa.

DELIGHTFUL WEATHER.—We have to this writing (Dec. 20th) had the most delightful weather for the season we ever saw—a continuous Indian summer. Consequently a vast amount of farm work has been done that otherwise would have been delayed till spring, such as planting trees, making fence, plowing, cleaning up, and other jobs too numerous to mention. It is prophecied on all hands that we shall have a mild winter. It is said that the habits of various wild animals indicate a mild winter. The "Milwaukee Wisconsin" has the following:

"Joel Hood, the celebrated auctioneer, who has been all over the North-western territories, the Pacific States, and the Sandwich Islands, and who probably knows as much about the peculiarities of wild animals (not to say anything about their furs) as any other man in the West, stakes his reputation on the prediction that we are to have a mild winter, with the prevailing winds from the South for the next six months. He bases his knowledge on the doings of the muskrats, beavers, and other animals this fall. He also says that it has been reduced to a certainty, by scientific and ordinary observation that whatever winds prevail when the equinoctial line is passed, they will prevail throughout the winter. This fall it was Southern winds, and therefore he is certain that they will be the prevailing winds throughout the winter."

Our thanks are due to the Editor of the "New England Farmer," which journal has entered upon its 17th year and volume, for the following complimentary notice of our journal. We are not personally acquainted with the Editor, but we shall endeavor to cultivate his acquaintance when we get in hailing distance of him, for he must be a clever Editor,

"THE VALLEY FARMER.—We have just laid this paper down, after carefully perusing every article which the present number contains. It is not only filled with excellent articles that are instructive to the farmer, but its selections are judicious, and will be valuable in the family circle. The "Valley Farmer" is printed on nice paper, is "made up" in good taste by the printer, and is every way worthy of an extended patronage. It has reached its FOURTEENTH year, is edited and published monthly at St. Louis, by NORMAN J. COLMAN, Esq."

GODEY'S LADY'S BOOK.—This most charming of all the monthlies, with so bright a face, such beautiful illustrations, such bewitching stories, all containing an excellent moral, is before us in due time. Who can do without it? It is a companion throughout the year, always greeting you in season, beguiling many a weary hour, elevating your mind and improving your heart. The New Year has begun. Terms: One copy, one year, $3; two copies, $5: three copies, $6.00. By all means, if you have lady friends, enclose $6.00 for three copies to L. A. Godey, Publisher, 323 Chesnut Street, Philadelphia, Pa.

THE ILLUSTRATED ANNUAL REGISTER FOR 1862 is just received. It is published by Luther Tucker and Son, of Albany, N. Y., at 25 cents a copy. It contains one hundred and sixty cuts illustrating various objects of interest to the farmer. It is edited by J. J. Thomas, one of the ablest and most reliable horticultural writers in America. This is the eighth volume, and a complete set of the work bound is one of the most desirable works that we know of for the farmer's library. For sale by Keith and Woods, St. Louis, Mo.

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THE SCIENTIFIC AMERICAN.—The "Louisville Journal" says of this sterling periodical: "We do not believe that even in this age of cheap publications any work can be more reasonable than the terms of the SCIENTIFIC AMERICAN at $2 per annum, with twenty-five per cent. discount for clubs of ten. It forms a yearly number of 832 pages quarto, with an immense number of original engravings of patented machines, valuable inventions, and objects of scientific interest. There is not an industrial pursuit which does not receive a share of its attention. It contains official lists of patent claims, important statistics, practical recipes for useful domestic purposes, and has long stood, both in this country and Europe, as the highest authority in the mechanic arts and sciences. There is no publication more valuable to the farmer, the miller, the engineer, the iron founder, the mechanic, or the manufacturer. We have never opened a number without learning something we never knew before, and obtaining valuable information for the benefit of our readers. The Publishers, Messrs. MUNN & Co., of 37 Park Row, New York, have deserved the success which they have achieved. No one should visit that city without calling at their palatial establishment, which is a museum of inventive genius collected from the entire world. If any of our friends away off in the country do not know this work, and will take our advice, they will mail $2 and become subscribers immediately, or by applying to the publishers they can obtain a specimen copy gratis, which will be sure to confirm the truth of our recommendation."

We fully endorse the above, and would recommend our readers to take Prentice's advice, and subscribe for the paper. A new volume commences on the first of January, and it being a valuable work of reference, containing, as it does, the only official list of patent claims published in the country, every number should be preserved. The paper is published every Saturday, by the well-known patent agents, Messrs. MUNN & Co. who have conducted the paper during the past 16 years.

In addition to furnishing specimen copies of the paper gratis, the publishers will send a pamphlet of advice to inventors, free of charge.

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In endless variety, with an assortment of all kinds of plants usually kept in the best and largest Nursery Establishments.

Letters of inquiry promptly answered. For further particulars, address CAREW SANDERS & CO.
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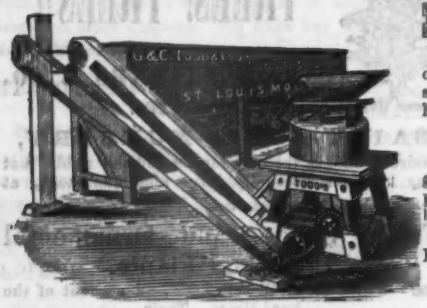
Mill Furnishings.

☞ *Established* 1835. ☜

TODD'S CHALLENGE.

As the under stone revolves, they may be run to a high speed without choking, and having RUBBER SPRINGS, patented by us, they **WILL NOT BURST WHILE RUNNING**, when pieces of iron get between them, as many mills have done on the stiff principle. Our spindles have steel toes and ines, with set screws at both ends, so that the faces of the stones can be kept parallel with each other, and the meal be ground even enough for Flour, which are important improvements, insuring SAFETY TO THE MILL TENDER, and good work, and ought to be put in all lower stone mills.



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The top Stone is the runner and operated the same as the ordinary flouring mills; their construction is simple and substantial and of the best material. Any good careful hand can run them.

Todd's Portable Flouring Mill.

This mill is simple, compact and complete, calculated to grind and bolt for the best custom or grist work—can be packed so as to ship to any place, and can be put together by any good mechanic.

Various sizes and prices.

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May'61,1y. No. 212 North Main Street, St. Louis, Mo.

GEO. HUSMANN. O. C. MANWARING.

HERMANN NURSERY.

HUSMANN & MANWARING, Proprietors,

HERMANN, MO.

Having much increased our business, we take pleasure in calling the attention of our friends, and the public generally, to our large and complete assortment of Fruit and Ornamental Trees and Shrubs, comprising the choicest varieties of

Apples, Pears, standard and dwarf; Cherries, standard and dwarf; Peaches, Plums, Apricots, Almonds, Quinces, Grapes, Currants, Gooseberries, Raspberries, Strawberries, Blackberries, Shade and Ornamental Trees and Shrubs, Evergreens, Vines, and Creepers, Roses, Dahlias, and other plants, Scions of Fruit Trees, Cuttings and Seedlings of Ornamental Trees, Shrubs, &c.

Most of the varieties were tested here and have proved successful in our soil and climate, and all are warranted true to name.

We would call the special attention of Grape Growers to our large assortment of native hardy grapes, comprising over sixty of the choicest varieties, which we have spared no pains nor cost to procure from the most reliable sources. Many of them have been tested here, and all will be tested in the open vineyard, and we shall recommend none until we have found them successful. This we may now confidently do with Norton's Virginia, Herbemont, Missouri and Concord, they having been tested beyond a doubt.

Descriptive Catalogues sent gratis to all applicants.

Orders directed to us personally, or to our local agents, will be promptly and carefully filled.

HUSMANN & MANWARING.

Hermann, Sept. 1859-tf.

☞ CIRCULAR.—OUR PRICED LIST for Spring of 1861, of STRAWBERRIES, RASPBERRIES, BLACKBERRIES, GRAPES, CURRANTS, GOOSEBERRIES, &c., &c., is now ready, and will be sent to all applicants, enclosing stamp. J. KNOX, Box 155, Pittsburgh, Pa.

[Jan.'62.]

☞ WANTED!—Any one having a FARM, within 12 miles of St. Louis, with from 80 to 100 acres under cultivation, with moderate improvements, can hear of a good tenant by addressing D. W. at this office. dec61

EARLY CANADA POTATOES.—The subscriber has a large quantity of this early and valuable new variety of Potato for sale; and as they should be planted in February, should now be procured. To suit the times, the price is only One Dollar per bushel. Also, some pure PEACH BLOW Potatoes, at 50 Cents per bushel. T. R. ALLEN, Allenton, Mo.

APPLE SEEDLINGS—We have for sale the following, viz: 100,000, 2 years, selected, at $2 50 ℔ 1000; 200,000, 1 year, selected, at $2 50 ℔ 1000; 200,000, 1 year, unassorted, $1 50 ℔ 1000.

COLMAN & DRAKE.

Bloomington, Ill., Oct. 15, 1861. [nov2t

APPLE SEED—A choice lot, clean and dry, of the growth of 1861, at $5 per bushel. Address, JAMES A. ROOT, Skaneateles, Onon. Co. N.Y. [nov2t